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THE EDUCATIONAL QUARTERLY
BULLETIN OF THE STATE
TEACHERS COLLEGE
AND JUNIOR COLLEGE
OF SAN DIEGO

Volume Thirteen

JUNE, 1925

No. 2

Announcement of
COURSES OF INSTRUCTION

OFFERED IN

Education, Teacher Training, Arts,
Literature, Science, Commerce,
Social Service

1925-1926



*Published Quarterly by the State Teachers College of San Diego,
SAN DIEGO, CALIFORNIA*

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 BULLETIN OF THE STATE
 TEACHERS COLLEGE
 AND JUNIOR COLLEGE
 OF SAN DIEGO

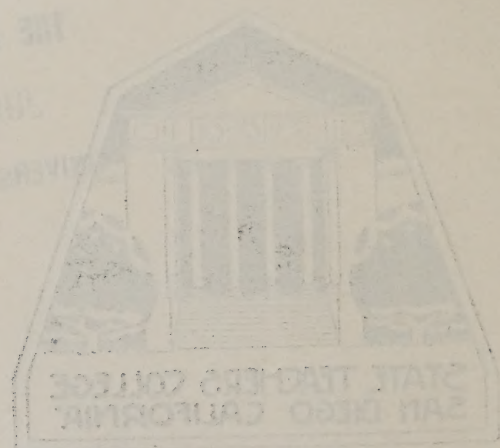
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1925/26 - 1934/35

STATE TEACHERS COLLEGE OF SAN DIEGO
Administered Through
DIVISION OF NORMAL AND SPECIAL SCHOOLS
OF THE
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FACULTY

EDWARD L. HARDY, President. School Administration. B.L., University of Wisconsin; M.A., University of Chicago; Study of European secondary schools, 1898-1899; Principal San Diego High School, 1906-1910. (Appointed September 1, 1910.)

ARTHUR G. PETERSON, Dean of the College. Economics and Sociology. A.B., College of the Pacific; M.A., Stanford University; Vice Principal San Diego High School and Director of Junior College, 1919, 1920, 1921. (Appointed September 1, 1921.)

MRS. ADA HUGHES COLDWELL, Dean of Women. Head Department of Household Economics. Special study, Europe, 1899-1900; special student in Domestic Science, Teachers College, Columbia University, New York City, 1907. (Appointed June, 1907.)

IRVING E. OUTCALT, Head Department of English and Dean of the Summer Session. Student, University of Illinois, 1888-1891; A.B., Stanford University, 1896; M.A., Stanford University, 1897; graduate student, Stanford University, 1897-1899; Head, Department of English, San Diego High School, 1907-1912; travel in Europe, 1910-1911; research work, Stanford University, 1921-1922. (Appointed September 1, 1912.)

WILLIS E. JOHNSON, Director of Education. Graduate of State Normal School, St. Cloud, Minnesota; Ph.B., A.M., Illinois Wesleyan University; A.B., A.M., Ph.D., University of Minnesota; Sc.D., South Dakota State College; LL.D., Dakota Wesleyan University. Taught in rural, village and city schools, state normal school and university. President of state normal schools at Ellendale, North Dakota, and Aberdeen, South Dakota, and of South Dakota State College, Brookings. Member of staffs of the educational surveys of Virginia and Alabama. (Appointed April 1, 1924.)

MRS. GERTRUDE SUMPTION BELL, Director of Tests and Measurements. AB., Indiana University; M.A., Stanford University; graduate Indiana State Normal School; research work, Clark University; Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University. (Appointed August 1, 1916.)

RUTH C. BAGLEY, English. A.B., University of Michigan; A.M., University of California; graduate study, University of Illinois and Columbia University; Head Department of English, State Normal School, Oshkosh, Wisconsin, ten years; Instructor, San Diego Junior College, 1919-1921. (Appointed September 1, 1921.)

O. W. BAIRD, Physics. A.B., University of Wisconsin; graduate study at University of Wisconsin, University of California, University of Washington; Instructor in Physics, University of Washington, one year; Head Department of Science, Tacoma High School, six years. (Appointed September 1, 1921.)

MARY BENTON, Head Department of Fine Arts. Student at Rosemont Dezailey, Lausanne, Switzerland; at Chicago Art Institute; at New York School of Art; pupil of W. J. Whittemore, of New York; pupil of Mrs. Butterworth, of New York; Instructor, State Normal School of San Diego. (Appointed July 1, 1916.)

LESLIE P. BROWN, Romanic Languages. A.B., Yale University; M.A., Harvard University; formerly Instructor in French and Spanish, University of Chicago. (Appointed July 1, 1922.)

VINNIE B. CLARK, Geography. A.B., University of Wisconsin. Graduate student, University of Chicago; Assistant in Geography, University of Wisconsin; Oak Park, Ill., High School, 1913-1914; travel in Mexico and graduate study, University of Mexico, 1922; Summer Session Instructor, University of California, Southern Branch, 1923; Travel in Europe, 1924. (Appointed September 1, 1914.)

KATHERINE E. CORBETT, Training Supervisor. B.Pd., Michigan State College; B.S. and A.M., Teachers College, Columbia University; graduate Public School Music course, Ypsilanti Conservatory of Music; Teacher in Public Schools, Ypsilanti; special teacher in Americanization courses; Training Supervisor, Kent State Normal College, Ohio. (Appointed July 1, 1921.)

- EARL DULANEY, Orchestra. A.B., A.M., Baylor University, Texas; graduate work, University of Texas; Supervisor of rural schools (Texas) 1919-1920; Instructor of Instrumental Music, Conservatory of Poplar Bluff, Missouri; County Director of Orchestral Work, Clay County, Arkansas; Conductor of La Jolla High School Orchestra, La Jolla, California, 1923-1925. (Appointed 1924.)
- MRS. EARL DULANEY, Director of Training School Orchestra. Graduate in Piano, St. Louis Conservatory of Music; Teacher of Piano and Violin, Indiana and Arkansas; Director of Brownie Orchestra, Peach Orchard, Arkansas. (Appointed 1924.)
- LESLIE S. EVERTS, Accounting. B.L., University of Wisconsin; C.P.A.; Public Accountant in Milwaukee, Wisconsin, and San Diego, California, 1909-1921. (Appointed September 1, 1921.)
- EDNA H. GILLESPIE, English and Typing. A.B., Southwestern College; A.M., University of Kansas; Principal of High School, Sedgwick, Kansas; Secretary to the President and Instructor in English, University of Southern California. (Appointed July 1, 1921.)
- EDITH C. HAMMACK, Training Supervisor. Graduate State Normal School of San Diego; B.A., State Teachers College of San Jose; professional study at University of California; Public School Teacher, five years. (Appointed September 1, 1910.)
- MRS. ALICE LILI HEIMERS, French and German. Student at Universities of Bonn, Lausanne, Berlin (Ph.D. Berlin). Postgraduate work at University of Chicago and Columbia University. Head of Department of Modern Languages, State Normal School, Indiana, Pa.; Assistant Professor of Modern Languages, St. Lawrence University, N. Y.; Supervisor of Foreign Language Press in the United States during the World War. Assistant Editor of "Foreign Born." (Appointed September 1, 1924.)
- EDGAR L. HEWETT, Anthropology. D.Sc., University of Geneva, Switzerland; Director, American Schools of Archaeology; Director, San Diego Museum. (Appointed September 1, 1922.)
- MYRTLE ELIZABETH JOHNSON, Biology. B.S. M.S., Ph.D., University of California; Research Assistant, Scripps Institute, La Jolla, California; Instructor, Pasadena High School, 1912-1921. (Appointed September 1, 1921.)
- MARJORIE E. LANDERS, Acting Head Department of Home Economics. A.B., Stanford University; Special Certificate Home Economics, Santa Barbara State Teachers College; Head Department Home Economics, San Juan Union High School; Assistant Dietitian, Fabiola Hospital, Oakland, California, 1916; McKinley High School, Honolulu, T. H.; Teacher Domestic Art, Kern County Union High School, Bakersfield, California. (Appointed September 1, 1924.)
- F. H. LANE, Public Speaking and Dramatics. A.B., A.M., Northwestern University, graduated by Northwestern School of Oratory; 1896-1898, Instructor of English and Public Speaking at Oberlin College; 1900-1903, Professor of English and Public Speaking, Northwestern College; 1903-1907, Professor of English and Public Speaking, Tabor College; 1907-1912, Professor of Public Speaking, Washburn College; 1912-1923, Professor of Public Speaking, University of Pittsburgh. (Appointed September 1, 1923.)
- CHARLES B. LEONARD,* History. A.B., M.A., University of California; graduate study, one year, at University of California; Instructor in History, Lowell High School, San Francisco. (Appointed September 1, 1921.)
- LEWIS B. LESLEY, History. A.B., Stanford University; M.A., University of California; Instructor, Principia School, St. Louis, Mo., 1920-1921; Teaching Fellow in History, University of California, 1922-1923; Native Sons' Traveling Fellow in Europe, from University of California, 1923-1924; Assistant, Department of History, University of California, Summer Session, 1924. (Appointed September 1, 1924.)
- GEORGE R. LIVINGSTON, Mathematics. B.S., M.A., University of California; graduate study, one year, University of California; Instructor, San Diego Junior College, 1914-1918; Instructor, Santa Barbara Junior College, 1919-1921. (Appointed September 1, 1921.)
- BEULAH MARKER,* Assistant Fine Arts. B.S., Columbia University; Teachers College diploma; graduate of Los Angeles State Normal School, with General

*On leave of absence, 1924-1925.

Professional and Special Art diplomas; Assistant in Fine Arts Department, Teachers College, Columbia University, 1918-1919. (Appointed July 1, 1919.)

RUBY MINOR, Supervisor, Training School. B.S., Teachers College, Columbia University; graduate student, Columbia University, two and one-half years. Stanford University, one year; Public School Teacher; Class Supervisor and Instructor, State Normal Colleges of Bowling Green, Ohio, Trenton, N. J., Emporia, Kansas; Summer Session Instructor, University of Indiana; Supervisor of Primary Instruction, Anderson, Indiana. (Appointed July 1, 1923.)

WILLIAM L. NIDA, Supervisor of Practice and Appointment Secretary. Ph.B., Ohio State University; graduate student, University of Chicago; Principal of Ohio High Schools, nine years; Superintendent of Schools, seventeen years, Illinois. (Appointed July 1, 1921.)

MARIAN L. PEEK, Supervisor, Training School. A.B. and A.M., Stanford University; Teacher in Public Schools; Assistant in History, Stanford University; Dean of Women, State Normal School, Cheney, Washington; Frances W. Parker School, San Diego, California. (Appointed September 1, 1923.)

CHARLES E. PETERSON, Physical Education. Student at Oregon Agricultural College, the University of California and the State Normal School of San Diego; student two years under Robert Krohn; Director of Playgrounds, Y. M. C. A. Physical Education, Physical Education and Recreation in United States Army camps; Instructor, Edison Junior High School, Berkeley, California; Instructor, State Normal School of San Diego. (Appointed July 1, 1921.)

LEO. F. PIERCE, Chemistry. B.S., Grinnell College; M.Sc., Tulane University; Ph.D., Stanford University; Research Assistant and Instructor, University of Idaho; Professor of Chemistry, Washburn College; Instructor, Tulane University; University Fellowship, Stanford University. (Appointed September 1, 1923.)

ALICE M. RAW, Physical Education. A.B., University of Southern California; Assistant in Physical Education, Polytechnic High School, Los Angeles; Assistant in Physical Education, University of Southern California. (Appointed September 1, 1923.)

MABEL M. RICHARDS, Arithmetic and Training Supervisor. A.B. and A.M., University of Missouri; graduate student, University of Southern California; Rural School, City School and High School Teacher; City Superintendent of Schools, six years; Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College, two years. (Appointed September 1, 1921.)

CHARLES R. SCUDDER, Industrial Arts. Preparation at University of Illinois; Teacher of Industrial Work at Grand Rapids, Michigan, and Director of Industrial Arts at Washington State Normal School at Bellingham. (Appointed September 1, 1918.)

W. T. SKILLING, Agriculture and Nature Study. State Normal School, Los Angeles, California; M.S., University of California; Teacher in Public Schools, Los Angeles, California, several years; Assistant in Physics, University of California, 1899-1901. (Appointed September, 1901.)

FLORENCE L. SMITH, English, A.B., Northwestern University; M. A., University of Chicago; Critic Teacher, State Normal School at Oshkosh, Wisconsin. (Appointed July 1, 1917.)

LEILA D. SMITH, Music. Mus. B., A.B., Oberlin College; formerly Head of Department of Music, State Teachers College, Winona, Minnesota. (Appointed September 1, 1922.)

WILL J. STANTON, Commercial Law. LL.B., University of Michigan; graduate study, University of Michigan; editor legal journal, fourteen years; Prosecuting Attorney, Michigan and California; Instructor, San Diego High School and Junior College. (Appointed September 1, 1921.)

S. LAVENDER STOVALL, Head of Department of Engineering. Student University of Texas, 1895-6, 1897-8; B.S. in Electrical Engineering, University of California, 1924. Five years with the General Electric Company, research and design of apparatus; five years Chief Engineer of Mt. Whitney Power and Electric Company; three years on Irrigation Engineering; four years Efficiency Engineer in the oilfields of California.

JESSE RAND TANNER, Head Department of Physical Education. Graduate Boston Normal School of Gymnastics; B. S., Columbia University; Bachelor's Teaching Diploma, Teachers College, Columbia University; tutor, Brookline, Massachusetts, 1901-1902. (Appointed July, 1904.)

WILLIAM H. WRIGHT, Commerce, B.S., University of California; graduate study, one year, University of California; Head Department of Commerce, Union High School, Visalia, California, 1919-1921. (Appointed September 1, 1922.)

Assistants

DOROTHY HARVEY, B. A., Biology

ESTHER ALLEN, Chemistry

GLENN VAN DOREN, Physics

HELENE MILHOLLAND, Library

LAURA CHASE, Office

STANDING COMMITTEES

Executive Committee: President E. L. Hardy; Mr. Outcalt, Vice Chairman; Mr. A. G. Peterson, Dean of the College; Mrs. Coldwell, Dean of Women; Mrs. Delano, Registrar; Dr. Willis E. Johnson, Director of Education; Miss Benton; Mr. Baird; Mr. Skilling.

Faculty-Student Body Relations Committee: Mr. A. G. Peterson, Mrs. Coldwell, Mrs. Delano, Dr. Willis E. Johnson, Miss Tanner, C. E. Peterson, Miss L. D. Smith, Miss Benton, President Hardy (Advisory).

Student Teaching Committee: Dr. Willis E. Johnson, Mrs. Delano, Mr. Nida, Miss Hammack, Miss Corbett, Mr. Scudder.

Advanced Standing Committee: Mrs. Delano, President Hardy, Mrs. Bell, Miss Benton, Mr. Outcalt.

Scholarship and Student Load Committee: Mr. Livingston, Mrs. Coldwell, Mr. A. G. Peterson, Miss Tanner, Mrs. Delano.

Assembly Committee: Miss Clark, Mr. A. G. Peterson, Miss L. D. Smith, Dr. Coy, Miss Peek, Miss F. L. Smith, Mr. Nida.

Faculty Social Affairs Committee: Miss Peek, Dr. Myrtle Johnson, Miss Bagley, Miss Richards, Mr. Brown, Mrs. Coldwell (Advisory).

Women's Athletics Committee: Miss Tanner, Dr. Coy, Miss Raw, C. E. Peterson, Miss Hammack.

Men's Athletics Committee: C. E. Peterson, Mr. Baird, Mr. Livingston, Mr. Wright, Mr. Lesley.

Publicity and Student Publications Committee: Miss F. L. Smith, Mr. Scudder, Mr. Nida, Mr. Stovall, Mrs. Bird.

Main Library Committee: Mr. Outcalt, Dr. Myrtle Johnson, Miss Minor, Dr. Pierce, Mr. Lesley, Mrs. Robinson (Advisory).

Training School Library Committee: Miss Minor, Miss Corbett, Miss Richards, Mr. Skilling, Miss Clark, Miss Woods (Advisory), Mrs. Robinson (Advisory).

Tests and Measurements Committee: Mrs. Bell, Dr. Willis E. Johnson, Mr. Skilling, Mr. Livingston, Miss Hammack.

Teaching Load Committee: Mrs. Bell, Mr. A. G. Peterson, Dr. Coy, Miss F. L. Smith, Mr. Baird, Miss Benton, Mr. Brown, President Hardy (Advisory).

Graduation Committee: Dr. Willis E. Johnson, Miss Clark, Miss Benton, Dr. Coy, Mr. C. E. Peterson.

Affiliation with other Colleges: Dr. Myrtle Johnson, Miss Hassack, Mr. Livingston.

SPECIAL LECTURERS

Summer Session of 1925

- DEAN BLAKE, Meteorology. U. S. Weather Observer, San Diego, California.
- OSGOOD HARDY, Ph.D., History. Assistant Professor of History, Occidental College.
- ZORAH HUDDLESTON, Nutrition as an Educational Problem. Nutrition Educator for the California Dairy Council.
- GERTRUDE LAWS, B.A., Education. Formerly Director of Education, Practice Teaching and Supervision, State Teachers College of San Diego.
- GEORGE M. MCBRIDE, Ph.D., Geography and Geology. Associate Professor of Geography, University of California, Southern Branch.
- HAROLD G. MERRIAM, M.A., English Literature. Professor of English, University of Montana.
- EMILY R. PIPAL, Physical Education. Instructor in Physical Education, Los Angeles City School Department.
- LEON O. SMITH, M.A., Education. Director of Educational Research, Public Schools of Omaha, Nebraska.

APPOINTMENTS FOR 1925-1926

- J. W. AULT, Principal of the Training School. Undergraduate work at Miami University and Valparaiso University, A. B. Graduate work at the University of Iowa and the University of South Dakota, M. A. Superintendent of city schools twelve years; conductor and instructor in teachers institutes; Professor of Education and Director of Practice Teaching at Southern State Teachers College, Springfield, South Dakota, 1922-24. (Appointed September 1, 1925.)
- WALLACE A. GILKEY, Assistant in Physical Science. A. B. and C. E. (Chemical Engineer) at Stanford University. Instructor at Seale Military Academy, spring of 1922. Employed three years in chemical engineering with the Santa Cruz Portland Cement Company in the Cottrell Precipitation Plant; the American Smelting and Refining Company as laboratory chemist; and the Refinery of Standard Oil Company at El Segundo, California, as chemical engineer. (Appointed September 1, 1925.)
- (To be appointed) Assistant Training School Supervisor.

HISTORICAL SKETCH

The State Teachers and Junior College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the legislature, later approved by the Governor of the state and becoming effective July 28, 1921, the designation of State Teachers-College, its full legal title being, "State Teachers College of San Diego."

In June of 1921, under an enactment of the legislative session of the same year, known as the "junior college" law, the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) are offered, both to students who wish to prepare for the work of the upper division (junior and senior years) of colleges and universities and to students who wish to prepare themselves for the teaching service in the new three- and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the degree A.B. (Major in Education), were established for this institution June 30, 1923.

For the certification of teachers, the authorized courses (elementary, special elementary, special secondary and junior high school) are offered, and require, approximately, two and one-half years, three years and four years of work done in residence.

GENERAL INFORMATION

CALENDAR, 1925-1926.

June 29-August 7, Term I, Summer Session.
 August 10-September 1, Term II, Summer Session.
 September 7-12, Registration.
 September 14, Matriculation examination in English (see p. 15).
 September 15, Class work begins.
 November 13, Term I ends.
 December 19, Christmas Recess begins.
 January 3, Christmas Recess ends.
 January 28-February 3, Mid-year examinations.
 February 4-7, Mid-year Recess.
 February 8, Semester II begins.
 April 9, Term I ends.
 April 10, Spring Recess begins.
 April 18, Spring Recess ends.
 April 19, Term II begins.
 May 1, Dedication Day (celebrated April 30).
 May 30, Memorial Day; a holiday.
 June 11, 14-17, Annual examinations.
 June 18, Commencement.
 June 28, Summer Session begins.

THE CALENDAR AND REGISTRATION

The college year is divided into the autumn and spring semesters of eighteen weeks each, followed by a summer quarter consisting of a first term of six weeks (the regular Summer Session) and a second term of four weeks in which professional courses of a seminar type are offered to students and teachers whose certification needs may be met by supplemental units of credit (not to exceed 4) earned in this term. Students may enter at the beginning of either semester and at the beginning of Term I of the summer quarter.

The Summer Session meets the needs of regular students who wish to gain credits toward the professional diploma or the A.B. degree, of teachers in service who wish further professional training and of Junior College students who wish to secure supplemental credit or to shorten the time for completion of work for the Junior College Certificate.

Registration of students will be made from September 7 to September 12. A duly certified transcript of the applicant's record must be in the possession of the Registrar of the Teachers College or the Dean of the Junior College on or before the day of the applicant's registration.

N. B.—For details, see "Requirements for Admission."

DEPARTMENTS OF INSTRUCTION

TEACHERS COLLEGE

The Teachers College offers courses for the training of teachers in both the primary and upper divisions of the elementary school, the junior high school, and the special fields of Fine Arts, Industrial Arts, Home Making, Music and Physical Education. The degree B.A. (Major in Education) is granted to students completing the four-year courses in elementary and junior high school education.

Certificate courses for candidates for the elementary certificate and for the elementary special certificates of the several types will continue to be regularly offered for those who wish to teach before completing a degree course. The special certification courses offered include preparation for the certificate of elementary and junior high school grade of the Arts Type (general class), Music Type (public school music), Prevocational Type (home making, occupations and home mechanics), Physical Education Type (physical training activities), and for the special certificate of secondary grade in physical training activities.

Students who wish to enter for special certificate courses should not fail to note the matriculation requirements outlined on page 25.

JUNIOR COLLEGE

In the Junior College division courses are offered in the following fields: Anthropology, Economics, Engineering, English, Foreign Language, Geography, Graphic Art, History and Political Science, Home Economics, Hygiene, Mathematics, Music, Natural Science, Philosophy and Psychology.

Descriptions of the courses in both the professional and the collegiate field, with complete information as to admission requirements, will be found on the pages following under the headings "Admission," "Curricula," etc.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students will be required to meet the health standards set by the department of physical education, and all lower division students, unless excused for cause, will be required to take the courses in physical education prescribed for freshmen and sophomores. Furthermore, each student will be expected, as a matter of efficient student and community life, to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. All freshmen are required to take the course in the technique of study, which includes tests of reading ability, of general intelligence, of attainment in English, together with student self-rating and other training in methods of efficient study and work. Frequent ratings of the student are made by his instructors, so that he may at all times know how he stands; but the ability of the student to manage his own educational career and to come reasonably near to his best capabilities are factors that will count in his final ratings.

Standards of character, as developed by and measured by honest student work, and as revealed by evidences of the possession of thorough-going self-respect and community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, and every student will have full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.

For the assistance of students and student organizations, adviserships have been established as follows:

THE STUDENT ADVISERS

Concerning matters of student-body policy, leaves of absence (men), personal advice (men), use of buildings, etc.—The Dean of the College.

Concerning appointments to teaching positions—The Appointment Secretary.

Concerning the housing and living arrangements of students, rules of conduct, student social affairs, personal advice (women), rules of attendance, etc.—The Dean of Women.

Concerning supervision of practice teaching, conferences, etc.—The Director of Teacher Training.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar (Teachers College); The Dean (Junior College).

Concerning health and physical condition, school athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The supervisors of training.

Concerning student-body affairs—The executive officers of the student body; The Dean of the College; The Dean of Women.

STUDENT LIFE AND ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, The Associated Students. The following list indicates the major activities:

Scientific: Chemistry Club, Engineering Club, Architectural Club.

Literary: English Club, Poetry Club, Press Club, Debate Club.

Dramatic: Two-Masque Players.

Music: Treble Clef Club, Male Chorus, Choral Club, College Orchestra.

SOCIAL AND ATHLETIC

Men: Men's Club, Epsilon Eta Society, Eta Omega Delta Society, The "Golden S," College "Y" Club.

Women: Associated Women Students, Women's Athletic Association, College Y. W. C. A., J. U. G. Club, Shen Yo Society, Sphynx Society, Fra Di Noi Club, Komo Klub, O. N. O. Club, and the social clubs, Pristis, Albatross, Petrel, Triton.

Men's Athletics: Football, baseball, basket ball, track, swimming and tennis.

Women's Athletics: Tennis, basket ball, fencing, rowing and swimming.

Publications: The Paper Lantern (weekly), and The Del Sudoeste (year book).

APPOINTMENT SERVICE

The department of recommendations has charge of the placement of graduates, assisting them in securing teaching positions and assisting superintendents and boards of school trustees in finding qualified teachers.

Recommendations are based on records which indicate every item in the candidate's equipment, and particular care is taken to select for nomination in each case a teacher who can meet the requirements of the position.

FEES AND EXPENSES

Tuition is free to all students.

Registration fee, each semester (not returnable)----- \$1 50

Tardy registration fee \$1.00 per day. Registration is not complete until student is in actual attendance.

Student body fee, each semester (not returnable)----- 4 50

Men's and women's organizations, each (not returnable)----- 50

LABORATORY FEES AND DEPOSITS

(Payable each semester)

	Fee	Deposit
Bacteriology (\$5 returnable)-----	\$10 00	\$5 00
Biology 10A-10B (\$2 returnable)-----	2 00	2 00
Botany (\$2 returnable)-----	3 00	2 00
Chemistry (\$2.50 returnable)-----	7 50	2 50
Clothing -----	---	1 50
Fine Arts (Advanced Design, Stage Craft, Costume Design)-----	---	1 00
Food Economics -----	---	3 00
Industrial Arts-----	---	1 00
Pattern Shop-----	---	2 50
Physical Education (men)-----	---	1 00
Physics (\$3 returnable)-----	1 00	3 00
Physiology -----	1 00	---
Surveying -----	1 00	---
Woodwork -----	---	1 50
Zoology (\$2 returnable)-----	3 00	2 00

EXPENSES: WOMEN STUDENTS

The Dean of Women will furnish, upon request, addresses of homes in which board and room may be secured, also a list of apartment houses which may be patronized by women students. Occasionally students are placed in homes where they may work for board and room, but it is not advisable to depend entirely upon such an opportunity because of the irregularity of the demand.

Board and room may be procured for from \$40 to \$45 a month. Apartments, consisting of one room, kitchenette and bath, rated at \$18 to \$35 a month, will accommodate one or two persons. A cafeteria is maintained by the college where noon-day meals are served at cost.

The minimum expense for one semester of eighteen weeks is estimated at \$210: Board and room, \$180; books, paper and other necessary materials, \$15; registration and student-body fees, \$6.50; laboratory fees, \$1 to \$10. Clothing, laundry, car-fare, recreation and personal incidentals are factors for the student to decide, but it is suggested that clothing be of the simplest type, such as gingham dresses, one-piece woolen dresses, one warm outside coat, and a very informal afternoon or evening dress with suitable accessories.

SELF HELP AND LOAN FUND

Opportunities for part-time employment for students not residents of San Diego are frequent, particularly in the case of young women who are able to assist as mother's helpers in housework or in the care of children. A limited amount of clerical work in offices and library, and of employment in the school cafeteria, may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. The loan fund is administered for students in the professional courses, seniors in teacher training being eligible for assistance. Application should be made to the Dean of Women. Men should consult the Dean concerning part-time employment.

BUILDINGS AND EQUIPMENT

The college building houses the library, the auditorium, the gymnasium, offices, laboratories and classrooms. The training school is housed in three separate units, and new buildings for this department are planned for the biennial period 1925-1927.

The building for Applied Arts was made ready for occupancy in September, 1922, as a result of the remodeling of the old Training School Building. A new building for physical education of men was finished January 1, 1923, and new quarters for the physical education of women at the same date.

The institution has facilities and equipment as follows:

A College Library of 22,000 volumes.

Laboratories for Physics, Chemistry, and Biological Science.

Shops, studios and laboratories for the courses in Fine and Industrial Arts and in Home Economics.

For Physical Education, a well equipped gymnasium, lockers and showers, classrooms, and athletic field, tennis courts, etc.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than the physical ones must be taken into account by the student choosing a college. The institutions and facilities that go to make up the "greater college" or the "greater university" must be present in a college or university city, if the student is to work in a genuinely cultural atmosphere. In cultural standards in art, music, literature, and science, San Diego is an eligible college city because while it is not a large city yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from

the San Diego Exposition of 1915-1916, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections, and the Director of the San Diego Museum is a member of the faculty of the College. The Art Gallery of the California Building often contains excellent exhibitions of pictures, and there are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings and pageants.

At La Jolla, within the city limits, the Scripps Biological Institute, operated by the University of California, gives opportunity, especially since the affiliation of the Junior College division of the San Diego State College with the University, for important co-operation in the biological field.

The pre-engineering courses in the Junior College will benefit greatly because the selection of San Diego by the United States Navy as the site of important navy activities, such as the Marine Base, the Naval Training Station, Naval Aviation and the Destroyer Force Base, has made available a great deal of machinery, material and equipment useful for study and observation, especially in the field of electrical engineering.

The Junior College courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point, particularly as the College will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The professional, teacher-training courses profit because of the policy of co-operation generously followed by the City School Department, which has resulted in the merger of the City Junior College with the Teachers College, and in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergartens, elementary schools, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for co-operation between the specialists of the city school system and the College.

Much of what is best in modern thought and influences is brought to the student body through its weekly assembly, the programs for which, as arranged by a committee of students and faculty, include almost every worth while type of topic and appeal.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration, class attendance, conduct of examinations, etc., college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system"; but there is a standard of honor as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom, or of student-body by-laws) and, usually, are settled by student action.

One problem, in process of solution, is that of student relations to the courses of study. At present, the studies are prescribed in arrangements of curricula and "courses," with certain elections by the individual student, and these prescriptions are, of course, necessary. However, an effort is being made to give the student body a certain voice in and responsibility for study arrangements, through a joint committee of students and faculty members.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills and mountains, all within compass of two hours of travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round, and the College Outdoor Theater makes possible the presentation of many student productions in drama and pageant.

REQUIREMENTS FOR ADMISSION

I. FRESHMAN STANDING

- a) A graduate of a California high school may enter either the Teachers College or the Junior College division of the San Diego State College without examination, provided the following requirements are satisfied:
1. The candidate must be duly certified as a graduate of an accredited California high school.
 2. The graduate must have completed a four-year high school course aggregating at least 15 standard units of preparatory work, including the following requirements for graduation prescribed by the California State Board of Education: English, 2 units; United States History and Civics, 1 unit; Laboratory Science, 1 unit; and two majors of at least 3 units each—a major consisting of three years of study in one of the following groups: (a) English (in vocational courses 1 unit of citizenship may be included with 2 units of English to make one major); (b) mathematics, including Mechanical Drawing; (c) History and Social Science; (d) Physical and Biological Sciences; (e) Foreign Language—3 or more units in one language, or 2 units in each of two languages.
 3. The candidate must be specially recommended for admission to the San Diego State College on the basis of a scholarship record that satisfies the prescribed requirements for admission to the University of California.
- N. B.—The admission form prescribed by the University of California must be used, and will be furnished upon request.*
- b) A candidate from a secondary school outside California that is accredited by the New England College Entrance Certificate Board, by the North Central Association of Colleges and Secondary Schools, or by other colleges and universities of recognized standing, will be admitted to freshman standing provided he has satisfied the requirements in (2) above, and has maintained an average scholarship standing well above the mark required by the school for graduation.
- c) A graduate of a California secondary school not accredited who is strongly recommended by the principal of his school will be admitted to freshman standing provided he satisfactorily passes examinations in at least 8 units of work selected from subjects prescribed for graduation by the California State Board of Education. Other candidates who are unable to present satisfactory school certificates may be admitted by successfully passing examinations in at least 15 standard high schools units. Matriculation examinations are held in the San Diego State College in the first week of September and the last week of January of each year.

Certificates of successful examinations before the College Entrance Examination Board will be accepted in lieu of matriculation examinations conducted by the San Diego State College. The entrance examinations of the Board are held in June each year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York, N. Y. They must be made upon a blank form to be obtained from the Secretary of the Board upon request.

For purposes of guidance, all students entering the college are required to take intelligence tests. Exceptions may be made in case of special students by the committee on scholarship and student load.

PREPARATION FOR THE VARIOUS CURRICULA

Junior College

The following preparatory subjects are required for admission to the Junior College curricula leading to certificates in the curricula in Letters and Science, Commerce, Journalism and Agriculture, and in the Premedical and Prelegal curricula :

English ¹ -----	2 units
A Foreign Language ¹ -----	2 units
A Laboratory Science ² -----	1 unit
Algebra -----	1 unit
Geometry -----	1 unit
United States History and Civics -----	1 unit
Electives -----	7 units

The following preparatory subjects are required for admission to the Junior College curricula leading to certificates in Engineering (Mechanical, Electrical, Civil or Chemical) :

English -----	2 units
Elementary Algebra -----	1 unit
Algebraic Theory -----	$\frac{1}{2}$ unit
Plane Geometry -----	1 unit
Trigonometry -----	$\frac{1}{2}$ unit
Physics -----	1 unit
Chemistry -----	1 unit
United States History and Civics -----	1 unit
Geometrical Drawing -----	1 unit
Electives ³ -----	6 units

Teachers College

A candidate for admission to the Teachers College curricula must have completed a standard high school course of 15 units, including the following :

Three units in each of two of any of the following five groups of subjects: English, Mathematics, Foreign Language, Physical and Biological Science, Social Science, with a required minimum, further, of 2 units in English, 1 in United States History and Civics and 1 unit in a Laboratory Science.

II. ADVANCED STANDING

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing. All teachers with experience must present verified statements of successful experience for the time (up to five years) for which they wish credit.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

¹ Three units of English and 2 units of French or German are required for admission to the Premedical curriculum.

² Chemistry is required for admission to the curriculum in Agriculture, and to the curriculum in Letters and Science when the candidate intends to specialize in Home Economics, Geography, and Physical Education and Hygiene. Chemistry and Physics (2 units) are required for admission to the Premedical curriculum, and to the curriculum in Letters and Science when the candidate intends to specialize in nursing or in a natural science. (Physics is recommended, but not required for students who intend to specialize in Zoology or Geography.)

³ French or German (2 units) is required for admission to the curriculum in Industrial or Engineering Chemistry.

(NOTE.—Deficiencies in certain subjects may be removed after the candidate has been admitted to freshman standing. The removing of such deficiencies, however, may make it necessary for the student to extend his college course beyond the normal period of time required for its completion.)

III. SPECIAL STUDENTS

Junior College.

A candidate not less than 21 years of age who has not had the opportunity to complete a satisfactory high school course but who is considered competent to undertake certain courses may be admitted to special standing. Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Applicants for admission to special status will be required to take a psychological test before admission. Special students may become candidates for graduation upon satisfying the regular entrance requirements.

Teachers College

A candidate not less than 24 years of age (21 years of age if honorably dismissed from war service, army, navy or auxiliary) may be admitted to special standing, and given such credit as may be determined by the Committee on Advanced Standing.

GENERAL REGULATIONS

REGISTRATION

All students are required to register on one of the regular registration days preceding the opening of the class work of each semester. Any continuing student who registers after the close of the first week of the semester is subject to limitation of his study list and to a late registration fee of one dollar a day. Changes in study lists may be made only with the approval of the proper study-lists officer. A fee of one dollar is charged for a change in the study list after the close of the regular registration period.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements and has demonstrated his ability to do satisfactory college work. The standing of all students is therefore provisional during the first semester of residence.

A student who enters with credit for a subject in which he did not receive a recommending grade may, under certain conditions, be permitted to remove his matriculation deficiency either (1) by passing an examination in the subject with a grade of B or (2) by continuing the same line of study in college in at least 6 units of work with a grade of B.

CLASSIFICATION

Regular students are those students who have complied with the requirements of matriculation and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 28 to 63 units of work are classified as sophomores; those who have completed 64 to 91 units are juniors; and those who have completed 92 or more units are seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation, or three hours of field or laboratory work.

Sixteen hours, or units, per week of recitations or lectures, or an equivalent in laboratory work, constitute an average semester's program. During the first semester of work at the College no student will be permitted to register for more than 16 units of work in addition to physical education. After his first semester of work, a student is ordinarily not permitted to register for less than 12 nor more than 18 unit-hours of new work, in addition to physical education, unless permission is given in advance by the proper study-lists officer. Ordinarily not more than 18 units, in addition to physical education, will be credited toward graduation for the work of any semester, unless the student was registered for at least 12 unit-hours in the preceding semester and attained an average grade of not less than B.

SPECIAL SUBJECT REQUIREMENTS

ENGLISH COMPOSITION

All entrants to the College are required to take a special examination in elementary English composition. No student who has failed to pass this examination will be given a certificate in either the Teachers College or the Junior College.

PHYSICAL EDUCATION AND HYGIENE

All regular students upon admission to the College must report to the proper health examiner for enrollment in physical education classes. A student may be excused from exercises in physical education on account of illness or physical disability only by petition to the health examiner.

Credit for work in hygiene is required in the freshman or the sophomore year.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed.

Grade points are assigned as follows: Grade A, 3 points per unit; B, two points per unit; C, one point per unit; D, no points; E, minus one point per unit; F, minus one point per unit. Removal of grade E or F will entitle the student to a cancellation of the "negative grade points" and a grade of D for the course (provision for "negative grade points" to be effective on and after September, 1924).

To qualify for a certificate in either the Teachers College or the Junior College, or for a transcript of scholarship record in transferring to another collegiate institution, a student must have earned as many grade points as he has earned units of credit; that is, he must have attained an average of at least "C" grade in all work undertaken at the College.

CONDITIONS AND FAILURES

Credit is not given for courses in which the student has been given a grade of E (conditioned) except upon the removal of the deficiency by supplementary examinations or study. A report of "incomplete" is made only in case the student, for good reasons, has been absent from class meetings or examinations or has failed to perform a definite part of the work of the course. A condition or "incomplete" not removed before the end of the following semester is considered a failure. In case of failure in a course no credit is given until the course has been repeated.

DISQUALIFICATION

A regular student who fails either (1) to pass in at least 8 units of duly registered work, or (2) to obtain at least 12 grade points in any semester is disqualified for further attendance at the College unless, after due consideration of the merits of the case, the Committee on Scholarship decides that the student shall be placed on probation.

The above rule applies with full force to special students who are registered in 12 or more units of work, but is modified in its application to limited students by considerations of outside work and condition of health.

A disqualified student may be reinstated, after an interval of one semester, for reasons satisfactory to the Committee on Scholarship.

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any quarter is ineligible in the next succeeding quarter to represent the College in connection with any athletic, literary, musical, dramatic, social, or other organization.

SPECIAL EXAMINATIONS AND RE-EXAMINATIONS

Entrance examinations and examinations taken for the purpose of removing matriculation deficiencies or making up a course left "incomplete" are regarded as special examinations. Re-examinations are permitted only for the purpose of removing deficiencies incurred in College courses and can not be taken for the purpose of improving the grade mark recorded on the student's permanent record.

A fee of two dollars, payable in advance, is charged for every special examination and re-examination.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer. An unauthorized withdrawal from a class may result in a mark of failure on the student's record. An unauthorized withdrawal in the second quarter of a semester is interpreted as a failure in the course.

LEAVE OF ABSENCE

A student should apply to his instructor for a leave of absence or an excuse for having been absent from a class exercise. A leave of absence for one or more days should be obtained from the proper dean. An excuse for absence does not relieve the student from completing all the work of each course to the satisfaction of the instructor.

HONORS

Honorable mention is granted with a Teachers College or a Junior College certificate to a student who has attained twice as many grade points as units of credit.

FELLOWSHIPS

Fellowships (without honorarium) have been instituted, a fellowship to be conferred by vote of the faculty on nomination of the department concerned, and to entitle the recipient to special training and to recommendation to county boards of education for the special elementary or the special junior high school certificate.

Candidates must be graduates of California, or equivalent, Teachers Colleges, and must submit satisfactory evidence of special fitness and attainment, or must be able to show two years of college or other equivalent training and special fitness.

Holders of fellowships who have done one year of satisfactory work, will be entitled to recommendation for the special elementary and junior high school certificate; provided, that within the period specified, they are able to meet the requirements of the State Board of Education for special certification.

PROFESSIONAL COURSES

THE ELEMENTARY DIPLOMA COURSE

(Lapses September 15, 1927)

This course can be completed, ordinarily, in two and one-half academic years, or in two calendar years by attendance at summer sessions. No student, except by special permission of the proper study-lists officer, will be permitted to carry more than 16 units of work a semester, or six units in a summer session. The total requirement is 76 semester units.

Note.—This course of seventy-six units will be superseded by the three-year (ninety-six unit) course outlined below, in the cases of all students who enter at such times as will bring completion of the course to the date September 15, 1927. The latest date at which a candidate can safely enter for the course of seventy-six units will be September, 1925, provided that his program includes the summer sessions of 1926 and 1927.

First Year (Two Semesters)¹

	Units of Credit
Education I (Introduction to Study of Education)-----	4
Education II (Psychology of Elementary School Subjects)-----	5
Curriculum Studies-----	
History-----	2.0
Geography-----	2.5
Mathematics-----	2.5
Natural Science-----	2.0
Art-----	2.5
Music-----	2.5
	14
Biology or Psychology-----	6
Physical Education-----	3

32

¹ Four or five units of electives may be taken in the first year by postponing certain professional courses to the second year.

Second Year (Three Semesters or Two Semesters and Two Summer Sessions)

	Units of Credit
Principles of Education.....	2
Educational Measurements	3
School Hygiene	2
Physical Education	3
Practice	12
Civic Education ¹	2
Public Education in California ¹	2
The Constitution of the United States ¹	2
Electives	16

44

The general collegiate electives must be taken from the following groups:

1. Language Subjects, including both linguistic and literary courses in English.
 2. Natural Science Subjects, including Mathematics, Geography, the Physical Sciences, etc.
 3. Biological Science.
 4. Social Science, including Rural Life, Selected Aspects of History, Sociology, Political Science, etc.
 5. Psychology, Principles of Education, etc.
- Six units of special elective work must be taken in the following groups:
- Manual and Industrial Arts
Household Arts
Physical Education
Music
Fine and Applied Arts
Elements of Agriculture

THE REVISED ELEMENTARY DIPLOMA COURSE

(Required of all students entering after September, 1925)

PRE-EDUCATION CURRICULUM (Freshman Year)	Units of Credit
English Composition (Written and Oral).....	6
Problems of Contemporary Civilization 1A, 1B, 1C, 1D	6
Social Ethics	—
Physical Education	1
Psychology 2A	3
Education I (Introduction to Study of Education).....	3
Natural Science *	6
Group Electives *	7

32

EDUCATION CURRICULUM (Sophomore Year)

Education II	5
--------------------	---

Curriculum Studies:

Geography	2.5
Mathematics	2.5
History	2.0
Natural Science	2.0
Art	2.5
Music	2.5

14

Educational Measurements	3
Physical Education	3
Group Electives *	7

32

¹ Upper division courses: can be taken only by students with 60 units of credit.

* The natural science and group electives must be so arranged as to include 12 units of social science and 12 units of biological and physical science during the three years.

EDUCATION CURRICULUM (Junior Year)

	Units of Credit
Principles of Education	2
Public Education in California	2
The Constitution of the United States	2
Education for Citizenship	2
Practice in Teaching	12
Physical Education	2
Health Education	2
Group Electives*	8
	32

PATTERN FOR SECOND YEAR IN A JUNIOR COLLEGE

	96
Group electives of sophomore and junior years*	16
Suggested electives to cover the fundamentals in the elementary school curriculum:	
Health Education	2
Physical Education	2
The Constitution of the United States	2
Art (Freehand Drawing and Design)	2
Music (Elements of)	2
Geography (preferably North America)	2
History (preferably Culture History)	2
	14
Other Electives	2
	32

NOTE.—Six units of the fundamentals outlined above can be done in the College Summer Session, if the student finds it difficult to arrange for them in the Junior College.

THE DEGREE COURSES

In accordance with legislation enacted in 1921, the State Board of Education has prescribed the following general requirements for the degree of Bachelor of Arts: LOWER DIVISION (Freshman and Sophomore Years)

I. Required	42 units
1. Psychology	6 units
2. Social Sciences	12 units
a) Contemporary Civilization	
b) Economics	
c) Political Science	
d) Sociology	
e) Geography	
3. Biological and Physical Sciences	12 units
4. English (including oral English)	6 units
5. Physical Education	6 units
	42 units
II. Required Group Electives ¹	22 units
1. English	
2. History	
3. Political Science	
4. Sociology	
5. Education ²	
6. Biological Sciences	
7. Philosophy or Psychology	

¹ Students must choose at least two fields, each not less than 6 units.

² Not more than 12 units in the Education group is to be allowed in the lower division nor more than 40 units in the upper and lower divisions of the four-year curricula. If the Psychology offered in Roman One is Educational Psychology, the 12 units of Education in the lower division shall include the same.

Not more than a total of 50 units in any one subject or group of subjects listed above is to be allowed in the upper and lower divisions of the four-year curricula.

* The natural science and group electives must be so arranged as to include 12 units of social science and 12 units of biological and physical science during the three years.

II. Required Group Electives—Continued.

8. Mathematics
9. Physics
10. Chemistry
11. Geography
12. Greek or Latin
13. Romanic Languages
14. Art
15. Music
16. Agriculture
17. Commerce
18. Physical Education
19. Industrial and Mechanical Arts
20. Home Economics

UPPER DIVISION (Junior and Senior Years)

III. For all degree courses leading to high school certification of teachers of special subjects, the minimum number of units of professional work shall be the same as the minimum number prescribed by the State Board of Education for the certification of general high school teachers; the minimum number of professional units for all degree courses leading to elementary certification shall be 32; and for all types the maximum number of professional units shall be 40. Every degree course shall include the following professional subjects:

- | | |
|---|----------|
| 1. Laboratory Practice, in Teaching, of which there must be a minimum of 5 units of classroom teaching----- | 10 units |
| 2. School Administration, inclusive of School Law----- | 2 units |
| 3. Objectives in Education----- | 3 units |
| 4. Educational Psychology ----- | 3 units |
| 5. Civic Education----- | 2 units |

20 units

IV. Electives listed under II above, to be administered on the same conditions as specified above----- 40 units

Total -----124 units

A student entering a State Teachers College without 2 years of Mathematics (other than Arithmetic) and 2 years of one Foreign Language must complete (before he receives the Baccalaureate Degree) 1 year (6 units) of Mathematics and 1 year (10 units) of a Foreign Language.

Individuals or groups of individuals wishing to teach before completing the full course may pursue in the lower division the work listed for the upper division. It is understood that such an inversion of sequence is approved that the student may enter the teaching service. If the student fails, after four years, to return to a State Teachers College for the completion of his work, his candidacy for the degree automatically lapses. If he returns after his candidacy has lapsed, the work previously taken will be evaluated upon a basis of the requirements in effect at the time of his return.

Each institution is authorized to adjust its several courses for the training of teachers to the minimum requirements herein prescribed, provided that they meet the requirements of the State Board of Education for certification in the various fields.

For graduation from the elementary diploma curriculum, a student is required to do at least sixteen (16) units of work in residence, from any of the three-year curricula not less than twenty-four (24) units of work in residence, and from any of the four-year curricula not less than thirty-two (32) units of work in residence.

CURRICULA FOR THE A.B. DEGREE

(Major in Education)

ELEMENTARY SCHOOL COURSE—LOWER GRADES

LOWER DIVISION	First Year	Units
General Psychology (2A) -----		3
Applied Psychology (2B) -----		3
Social Science (Government 1A and 1B or Economics 1A and 1B or History of Modern Europe 4A and 4B or History of Americas 8A and 8B, etc.) -----		6
Biology -----		5
English -----		6
Physical Education -----		3
Electives ¹ -----		6
		32

Second Year

Social Science (General Sociology 50, and Social Psychology or Introduction to Economic Geography, etc.) -----	6
Biology -----	7
Music I and II -----	3
Elementary School Natural Science -----	3
Physical Education -----	3
Electives ¹ -----	10
	32

UPPER DIVISION	Third Year	Units
Educational Psychology -----	6	
Curriculum Studies -----	6	
Educational Measurements II -----	2	
School Administration and California School Law -----	2	
Civic Education -----	2	
Electives ² -----	14	
		32

Fourth Year

The United States Constitution -----	2
Outlines of Culture Growth, or History of Education -----	2
Professional Electives -----	5
Laboratory Practice -----	11
Electives ² -----	12
	32

ELEMENTARY SCHOOL COURSE—UPPER DIVISION

LOWER DIVISION	First Year	
General Psychology (2A) -----	3	
Applied Psychology (2B) -----	3	
Social Science (Government 1A and 1B or Economics 1A and 1B or History of Modern Europe 4A and 4B or History of Americas 8A and 8B, etc.) -----	6	
Biology -----	5	
English -----	6	
Physical Education -----	3	
Electives ¹ -----	6	
		32

¹ Electives in the lower and upper divisions must include 1 year (6 units) of Mathematics, if two years were not taken in high school, and 1 year (10 units) of a Foreign Language, if not previously taken in high school.

² Must include 6 units in the field of Music and Physical Education, and 6 units in the field of Fine and Industrial Arts.

Second Year		Units
Social Science (General Sociology 50, and Social Psychology or Introduction to Economic Geography, etc.)	-----	6
Biology	-----	7
Physical Science	-----	6
Physical Education	-----	3
Electives ¹	-----	10
		32
UPPER DIVISION Third Year		
Educational Psychology	-----	6
Curriculum Studies	-----	6
Educational Measurements II	-----	2
School Administration and California School Law	-----	2
Civic Education	-----	2
Electives ²	-----	14
		32
Fourth Year		
The United States Constitution	-----	2
Outlines of Culture Growth, or History of Education	-----	2
Professional Electives	-----	5
Laboratory Practice	-----	11
Electives ²	-----	12
		32

JUNIOR HIGH SCHOOL COURSE

LOWER DIVISION First Year		
General Psychology (2A)	-----	3
Applied Psychology (2B)	-----	3
Social Science (Government 1A and 1B or Economics 1A and 1B or History of Modern Europe 4A and 4B or History of Americas 8A and 8B, etc.)	-----	6
Biology	-----	5
English	-----	6
Physical Education	-----	3
Electives ¹	-----	6
		32
Second Year		
Social Science (General Sociology 50, and Social Psychology or Introduction to Economic Geography, etc.)	-----	6
Biology	-----	7
Physical Science	-----	6
Physical Education	-----	3
Electives ¹	-----	10
		32
UPPER DIVISION Third Year		
Educational Psychology	-----	6
Curriculum Studies	-----	6
Educational Measurements II	-----	2
School Administration and California School Law	-----	2
Civic Education	-----	2
Electives ²	-----	14
		32

¹ Electives in the lower and upper divisions must include 1 year (6 units) of Mathematics, if two years were not taken in high school, and 1 year (10 units) of a Foreign Language, if not previously taken in high school.

² Electives must include 6 units each of two fields, also in the lower division.

Fourth Year

	Units
The United States Constitution-----	2
Outlines of Culture Growth, or History of Education-----	2
Principles of Junior High School Education-----	2
Laboratory Practice -----	11
Professional Electives -----	3
Electives ¹ -----	12
	32

CURRICULA FOR SPECIAL CERTIFICATION

NOTE.—The curricula for special credentials of elementary and junior high school grade must meet the requirement of (a) three years of training (90 to 96 semester hours) beyond the completion of a standard high school course, or (b) two years of such training and either two years of successful experience in teaching the subject or subjects named in the credential or two years of practical experience in the field of the subject.

The curricula for special credentials of secondary school grade must include (a) four years of training (120 to 128 semester hours) beyond the standard high school course, or (b) two or three years of such training and either two to four years of successful experience in teaching the subject or subjects named in the credential or two to four years of practical experience in the field of the subject.

For descriptions of the courses, consult the pages under the headings "Professional Courses" and "Collegiate Courses."

PHYSICAL EDUCATION TYPE

(Physical Training Activities)

Credential of Elementary and Junior High School Grade

PROFESSIONAL REQUIREMENTS

For a long-term Credential: The general requirements must include at least twelve (12) semester-hours of courses in the Department of Education distributed approximately as follows:

	Semester Hours
1. Educational Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Education for Citizenship-----	2
4. Practice Teaching -----	5
Total -----	12

(Credit for practice teaching may be allowed for persons who have had one or more years of successful teaching experience.)

Physical Training Activities: A minimum of training of sixteen (16) semester-hours distributed approximately as follows:

	Semester Hours
1. Biology -----	3
2. Human Physiology -----	4
3. Hygiene and First Aid-----	2
4. Growth and Development of the Child-----	2
5. Administration of Physical Education in Elementary and Junior High Schools -----	1
6. Methods in Play Activities-----	3
7. Methods in Formal Activities-----	1
Total -----	16

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester-hours.

¹ Must include 6 units in the field of Music and Physical Education, and 6 units in the field of Fine and Industrial Arts.

Credential of Secondary School Grade

PROFESSIONAL REQUIREMENTS

For a long-term Credential: The above general requirements must include at least fifteen (15) semester-hours of courses in the Department of Education, distributed approximately as follows:

	Semester Hours
1. Principles of Secondary Education-----	2
2. Educational Psychology and Principles of Teaching-----	3
3. Public Education in California-----	2
4. Education for Citizenship-----	2
5. Practice Teaching-----	4
6. Course for Teaching in Special Field-----	2
Total -----	15

(Credit for practice teaching may be allowed for persons who have had one or more years of successful teaching experience.)

Physical Training Activities: For fully qualified applicants the minimum amount of training required is eighteen (18) semester-hours, distributed approximately as follows:

	Semester Hours
1. Biology-----	3
2. Human Physiology-----	4
3. Hygiene and First Aid-----	2
4. Growth and Development of the Child-----	2
5. Theory of Teaching and Leadership in Physical Education-----	1
6. Administration of Physical Education in Secondary Schools-----	2
7. Methods in Play Activities-----	3
8. Methods in Formal Activities-----	1
Total -----	18

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 120 semester-hours.

ARTS TYPE

Credentials of Elementary and Junior High School Grade

PROFESSIONAL REQUIREMENTS

The general requirements must include at least 12 semester-hours of courses in the Department of Education distributed approximately as follows:

	Semester Hours
1. Principles of Teaching and Educational Psychology-----	3
2. Public Education in California-----	2
3. Education for Citizenship-----	2
4. Practice Teaching and Methods Courses-----	5
Total -----	12

(Credit for Practice Teaching may be allowed for one or more years of successful teaching experience.)

GENERAL CLASS

For fully qualified applicants: A minimum of forty semester-hours of special education and training, suited to the needs of teachers of children of elementary and junior high school grades, and distributed approximately as follows:

	Semester Hours
1. General Freehand and Mechanical Drawing, Lettering, Painting and Design -----	12
2. Dress Design -----	2
3. Fabric Design -----	2
4. Furniture Design -----	3
5. Home Decoration and Furnishing -----	2
6. House Design -----	3
7. Home Grounds Design -----	1
8. Ceramics -----	2
9. Clay Art Craft -----	2
10. Metal Art Craft -----	2
11. Leather Art Craft -----	2
12. Art Electives -----	7
Total -----	40

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester-hours.

MUSIC TYPE (Public School Music)

NOTE.—Students may matriculate for this curriculum only upon the fellowship plan outlined on page 19 of this bulletin. Applicants for admission should send complete transcripts of record showing the number of semester-hours of work in Music completed toward the forty hours of special education and training outlined below.

Credential of Elementary and Junior High School Grade

PROFESSIONAL REQUIREMENTS

The general requirements must include at least twelve semester-hours of courses in the Department of Education distributed approximately as follows:

	Semester Hours
1. Principles of Teaching and Educational Psychology -----	3
2. Public Education in California -----	2
3. Education for Citizenship -----	2
4. Practice Teaching and Method Courses -----	5
Total -----	12

(Credit for Practice Teaching may be allowed for one or more years of successful teaching experience.)

GENERAL CLASS

For fully qualified applicants: A minimum of forty semester-hours of special education and training, suited to the needs of teachers of children of the elementary and junior high school grades, and distributed approximately as follows:

	Semester Hours
1. Voice -----	6
2. Piano -----	4
3. Instruments and Orchestra -----	2
4. Choral -----	4
5. Harmony and Composition -----	8
6. Sightsinging -----	4
7. Ear Training and Music Writing -----	6
8. History and Literature of Music -----	4
9. Music Appreciation -----	2
Total -----	40

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester-hours.

PREVOCATIONAL TYPE

(Home Making)

PROFESSIONAL REQUIREMENTS

The general requirements must include at least twelve (12) semester-hours of courses in the Department of Education distributed approximately as follows:

	Semester Hours
1. Educational Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Courses Designed Particularly to Prepare for Teaching in the Special Field and Practice Teaching-----	5
4. Education for Citizenship-----	2
Total -----	12

(Credit for four (4) semester-hours of practice teaching may be allowed for persons who have had one or more years of successful teaching experience.)

SPECIAL REQUIREMENTS

A minimum training of thirty-two (32) semester-hours of collegiate work distributed approximately as follows:

	Semester Hours
1. Home Art and Design-----	6
2. Home Gardening and Landscaping-----	3
3. Science, Supplementing Household Occupations-----	2
4. Care of House and Housekeeping Processes-----	2
5. Dietetics and Nutrition-----	2
6. Food Study and Cookery-----	6
7. Health, Home Nursing and Child Care-----	3
8. Home Economy and Accounting-----	2
9. Clothing and Home Sewing-----	6
Total -----	32

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester-hours.

PREVOCATIONAL TYPE

(Occupations and Home Mechanics)

Credential of Elementary and Junior High School Grade

(Offered for the "Limited Class" only)

PROFESSIONAL REQUIREMENTS

The general requirements must include at least twelve semester-hours of courses in the Department of Education distributed approximately as follows:

	Semester Hours
1. Educational Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Courses Designed Particularly to Prepare for Teaching in the Special Field and Practice Teaching-----	5
4. Education for Citizenship-----	2
Total -----	12

(Credit for four (4) semester-hours of practice teaching may be allowed for persons who have had one or more years of successful teaching experience.)

SPECIAL REQUIREMENTS

For Limited Class: A minimum of training in each of a sufficient number of the special subjects listed below (elementary and junior high school grade) to total twenty (20) or more semester-hours.

In this class, only short-term Credentials may be granted and only in the subjects completed.

For General Class: A minimum of training of forty (40) semester-hours distributed approximately as follows:

	Semester Hours
1. Electrical Work-----	2
2. Iron Work (forge, sheet metal, pipe fitting, machine work)-----	7
3. Woodwork-----	7
4. Upholstering-----	2
5. Painting, Finishing and Decorating-----	2
6. Leather Work (shoe repair)-----	1
7. Clay and Cement Work-----	2
8. Freehand and Mechanical Drawing-----	4
9. Art Crafts-----	3
10. Basketry and Weaving-----	2
11. Paper and Cardboard Construction-----	2
12. Study of Occupations-----	6
Total-----	40

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester-hours.

NOTE.—For description of the professional courses, see "Education," under the general heading "Courses of Instruction."

REQUIREMENTS FOR THE JUNIOR COLLEGE CERTIFICATE, 1925-1926

The curricula in Letters and Science, Commerce, Journalism, Law, Medicine, Architecture, Social Service, and Engineering are planned to prepare for junior standing in the University of California and other colleges and universities in California. Some modification of the curricula are necessary to meet the requirements for junior standing in certain colleges and universities outside California.

LETTERS AND SCIENCE (LIBERAL ARTS) CURRICULUM

(With the required entrance credits and a proper selection of electives in the freshman and sophomore years, the curriculum in Letters and Science will prepare for the major work required for an A.B. degree in the following subjects: Anthropology, Astronomy, Botany, Chemistry, Economics, Education, English, French, German, Graphic Art, History, Household Art, Household Science, Mathematics, Physical Education, Physics, Physiology, Political Science, Psychology, Public Speaking, Spanish, Zoology.)

a) General Requirements for All Students.

An examination in Subject A (English composition).
Hygiene, 1 unit (Men), 2 units (Women).
Physical Education, 2 units.
Social Ethics.
Problems of Contemporary Civilization, 6 units.
English Composition, 6 units.

b) Foreign Language.

At least 15 units in not more than two languages. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

c) Mathematics.

High school courses in elementary Algebra and Geometry.

d) Natural Science, 12 units.

A maximum of 6 units chosen from the following:

High School Physics, 3 units.

High School Chemistry, 3 units.

¹High School Botany, 3 units.

¹High School Biology, 3 units.

¹High School Physiology, 3 units.

A minimum of 6 units chosen from the following:

Astronomy 1, 3 units.

Biology 10A-10B, 6 units.

Botany 2A-2B, 8 units; Botany 4, 3 units.

Chemistry 1A-1B, 10 units; 6A-6B, 6 units; 8-9, 6 units.

Physics 2A-2B, 6 units; 3A-3B, 2 units; 1A-1B and 4A-4B, 12 units.

Zoology, 1A-1B, 10 units.

e) Foreign Language, additional to (b) or Mathematics, additional to (c); 6 units, chosen from the following:

French: Any two consecutive courses of A, B, C, D, 102A, 102B.

Spanish: Any two consecutive courses of A, B, C, D, 102A, 102B, 105A, 105B, 110A, 110B.

German: Any two consecutive courses of A, B, C, D, SC-SD.

Latin: Two years of high school Latin, each year counting as 3 units.

Mathematics: 1A-1B or 3A-3B.

f) History, Economics, Political Science, 6 units, chosen from the following:

History 4A-4B, 8A-8B, Economics 1A-1B, Political Science 1A-1B.

COMMERCE CURRICULUM

a) General Requirements.

An examination in Subject A (English composition).

Hygiene, 1 unit (Men), 2 units (Women).

Physical Education, 2 units.

Social Ethics.

Problems of Contemporary Civilization, 6 units.

English Composition, 6 units.

b) A reading knowledge of French, Spanish, or German, 9 units.

(A high school language may be used to satisfy this requirement in part or in whole, each year-course counting as 3 units.)

c) History 4A-4B, 8A-8B, or Political Science 1A-1B, 6 units, or any combination of the foregoing courses.

d) Geography 1, 3 units, and Geography 2, 3 units.

e) Mathematics of Investment 2, 3 units.

(Prerequisite: Mathematics 1A or one year of high school advanced algebra.)

f) Natural Science, 9 units.

(This requirement may be satisfied in part by high school courses in physics and chemistry, each year-course counting as 3 units.)

g) Economics 1A-1B, 6 units.

h) Electives ².

CURRICULUM IN JOURNALISM

The aim of the course in Journalism is twofold: (1) to provide studies in the four departments of instruction—English, History, Economics, and Political Science—which constitute a foundation essential to the successful pursuit of journalism as a

¹High School courses in Biological Sciences can not be used to meet the natural science requirements of University of California.

²Electives recommended: Psychology 2A-2B, Sociology 50, Public Speaking 1A-1B, Commercial Law 18A-18B, Accounting 14A-14B, additional foreign language.

profession; (2) to offer introductory courses in the principles and practice of journalism, supplemented by lectures of specialists in the field and by practical work in news gathering and writing for student publications and for the local daily press.

First Year	Sem. I Units	Sem. II Units
English 1A-1B -----	3	3
Problems of Contemporary Civilization 1A, 1B, 1C, 1D-----	3	3
Typewriting 2 A -----	2	
Periodic Literature 60-----		2
Hygiene -----	1	
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----		
Electives ² -----	6	7
	15 $\frac{1}{2}$	15 $\frac{1}{2}$

Second Year		
News Gathering and Reporting 51A ¹ -----	3	
News Editing and Correspondence 51B ¹ -----		3
At least 12 units chosen from Psychology 2A-2B, History 4A-4B, Economics 1A-1B, Political Science 1A-1B-----	6	6
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Electives ² -----	7	7
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

PRELEGAL CURRICULUM

a) The requirements of the Letters and Science curriculum or, in special cases, the Commerce curriculum should be met in full.

b) Electives recommended:

History 4A-4B, 6 units.
Economics 1A-1B, 6 units.
Political Science 1A-1B, 6 units.
Public Speaking 1A-1B, 6 units.
Mathematics 1A-1B, 6 units.
Sociology, 50, 3 units.
Psychology 2A-2B, 6 units.
Accounting 14A-14B, 8 units.
Business Law 18A-18B, 6 units.

PREMEDICAL CURRICULUM

a) The requirements of the Letters and Science curriculum should be met in full.

b) Additional requirements:

Chemistry 1A-1B, 10 units.
Chemistry 8-9, 6 units.
Zoology 1A-1B, 10 units.
A reading knowledge of German or French (3 years of high school German or French or 10 units of college German or French).

c) Electives recommended:

Physics 2A-2B, 6 units.
Physics 3A-3B, 2 units.
Chemistry 6A-6B, 6 units.

¹ With the consent of the instructor, News Gathering and News Editing may be taken in the freshman year.

² Electives should be chosen so as to conform to the requirements of the Letters and Science curriculum or the Commerce curriculum.

Electives recommended: Shorthand, Accounting 14A-14B, Business Law 18A-18B, Art History and Appreciation 1, Art Structure 6A, Music History and Appreciation 3, Great Books 4, Types of Literature 52A-52B, Anthropology 1A-1B, Sociology 50.

PREARCHITECTURAL CURRICULUM

- a) The requirements of the Letters and Science curriculum should be met in full.
- b) Additional requirements:
- Mathematics 3A-3B, 6 units.
 - Mathematics 4A-4B, 6 units.
 - Physics, 1A-1B, 6 units.
 - Art A-B, 4 units.
 - Art 6A, 2 units.
 - Art 12B, 2 units.
 - Descriptive Geometry 3D, 3 units.
- c) Electives recommended:
- Art 1, 3 units.
 - Art 6B, 2 units.

SOCIAL SERVICE CURRICULUM

- a) The requirements of the Letters and Science curriculum should be met in full.
- b) Electives recommended:
- Economics 1A-1B, 6 units.
 - Psychology 2A-2B, 6 units.
 - Anthropology 1A-1B, 4 units.
 - Sociology 50, 3 units.
 - Social Psychology 145, 3 units.
 - Field Studies 149, 2 units.
 - Biology 10A-10B, 6 units.

MECHANICAL, ELECTRICAL, CIVIL AND MINING ENGINEERING CURRICULA

	Sem. I Units	Sem. II Units
First Year		
Mathematics 3A-3B -----	3	3
Physics 1A-1B -----	3	3
Chemistry 1A-1B -----	5	5
Plane Surveying 1A-1B -----	3	3
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----	3	3
Hygiene 1 -----		1
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----		
	17$\frac{1}{2}$	18$\frac{1}{2}$
Second Year		
<i>Mechanical and Electrical Engineering</i>		
Mathematics 4A-4B -----	3	3
Physics 1C-1D -----	3	3
Descriptive Geometry 3D -----	3	
Machine Drawing and Design 6A -----	1	4
Applied Mechanics 1A -----	3	
Electrical Engineering 1 or Applied Mechanics 1B -----		3
Pattern Shop 8A-8B -----	2	2
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
English Composition -----	3	3
	18$\frac{1}{2}$	18$\frac{1}{2}$
<i>Civil Engineering</i>		
Mathematics 4A-4B -----	3	3
Physics 1C-1D -----	3	3
Descriptive Geometry 3D -----		3
Economics 1A -----	3	
English Composition -----	3	3
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$

Railroad and Irrigation:	Sem. I Units	Sem. II Units
Applied Mechanics 1A-----	3	
Pattern Shop 8A-8B-----	2	2
Electives -----	1	4
	18½	18½
Sanitary and Municipal:		
Chemistry 8-9-----	3	3
Chemistry 6A-6B-----	3	3
	18½	18½

CURRICULUM IN INDUSTRIAL AND ENGINEERING CHEMISTRY

First Year

Mathematics 3A-3B-----	3	3
Physics 1A-1B-----	3	3
Chemistry 1A-1B-----	5	5
English Composition-----	3	3
Problems of Contemporary Civilization 1A, 1B, 1C, 1D-----	3	3
Hygiene 1-----		1
Physical Education-----	½	½
Social Ethics-----		--
	17½	18½

Second Year

Mathematics 4A-4B-----	3	3
Physics 1C-1D-----	3	3
Chemistry 6A-6B-----	3	3
Chemistry 8-9-----	3	3
German A-B-----	5	5
Physical Education-----	½	½
	17½	17½

CURRICULUM IN AGRICULTURE

One Year

Chemistry 1A-1B-----	5	5
Zoology 1A (or Biology 10A-10B, 6 units)-----	5	
Botany 2A-2B-----	4	4
Hygiene 1-----	1	
Physical Education-----	½	½
Social Ethics-----		--
Problems of Contemporary Civilization 1A, 1B, 1C, 1D-----	3	3
Electives *-----	--	6
	18½	18½

CURRICULA IN ACCOUNTANCY AND SECRETARIAL TRAINING

The aim in giving courses in Accountancy and in Secretarial Training is to offer a business preparation of college grade. The courses are open to high school graduates who majored in commercial subjects as well as to those who have had no training for business. Candidates of not less than twenty-one years of age who have not completed four years of high school work may also be admitted as special students. The curricula have been formulated with a recognition of the varying needs of those who plan to engage actively in commercial pursuits. To this end, courses of one and of two years in length are provided in Accountancy and in Secretarial Training, or in a combination thereof. A minimum of sixty-four units of credit is required for a certificate.

* Electives should be chosen so as to meet the following requirements, including matriculation credit, before the end of the freshman year. (Each high school year-course counts as 3 units.) English, 12 units; mathematics, including trigonometry, 12 units; physics, 3 units; history or economics, 9 units; mechanical drawing, 3 units.

It is the intention in the different courses to encourage individual research work in order that the student may become more resourceful, self-reliant, and keener to analyze and cope with business conditions and problems. To furnish material for this work, the city of San Diego will be used as a laboratory, through the cooperation of merchants, manufacturers, transportation men and financiers.

ACCOUNTANCY

One-Year Course

	Sem. I Units	Sem. II Units
Accounting 14A-14B -----	4	4
Commercial Law 18A-18B -----	3	3
English Composition -----	3	3
Business Mathematics A -----	2	
Typewriting 1A-1B -----	4	4
Social Ethics -----		
Elective -----		2
	16	16

Two-Year Course (leading to Junior College Certificate in Accountancy)

First Year

Accounting 14A-14B -----	4	4
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	2	
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----	3	3
Hygiene -----		1
Physical Education -----		$\frac{1}{2}$
Social Ethics -----	$\frac{1}{2}$	
Elective -----	3	4
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

Second Year

Advanced Accounting 160A-160B -----	3	3
Commercial Law 18A-18B -----	3	3
Economics 1A-1B -----	3	3
English Composition -----	3	3
Office Practice 3A -----		3
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Electives -----	4	1
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

SECRETARIAL TRAINING

One-Year Course

Accounting 14A -----	4	
Shorthand 1A-1B -----	5	5
Typewriting 1A-1B -----	4	4
English Composition -----	3	3
Business Mathematics A -----		2
Office Practice 3A -----		3
Social Ethics -----		
	16	17

Two-Year Course (leading to Junior College Secretarial Certificate)

	First Year	Sem. I Units	Sem. II Units
Shorthand 1A-1B -----		5	5
Typewriting 1A-1B -----		4	4
Business Mathematics A -----		2	
Hygiene 2 -----			2
Physical Education -----		$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----			
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----		3	3
Electives * -----		3	3
		17 $\frac{1}{2}$	17 $\frac{1}{2}$
	Second Year		
Commercial Law 18A-18B -----		3	3
Office Practice 3A -----			3
Economics 1A-1B -----		3	3
Accounting 14A-14B -----		4	4
English Composition -----		3	3
Physical Education -----		$\frac{1}{2}$	$\frac{1}{2}$
Electives * -----		3	
		16 $\frac{1}{2}$	16 $\frac{1}{2}$

ACCOUNTANCY AND SECRETARIAL TRAINING

Two-Year Combined Course	First Year		
Accounting 14A-14B -----		4	4
English Composition -----		3	3
Typewriting 1A-1B -----		4	4
Business Mathematics A -----		2	
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----		3	3
Hygiene -----			2
Physical Education -----		$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----			
		16 $\frac{1}{2}$	16 $\frac{1}{2}$
	Second Year		
Advanced Accounting 160A-160B -----		3	3
Commercial Law 18A-18B -----		3	3
Office Practice 3A -----			3
Economics 1A-1B -----		3	3
Shorthand 1A-1B -----		5	5
Physical Education -----		$\frac{1}{2}$	$\frac{1}{2}$
Electives -----		2	
		16 $\frac{1}{2}$	17 $\frac{1}{2}$

* Students who plan to enter the consular service should elect Political Science A-1B, 6 units, and a foreign language.

COURSES OF INSTRUCTION, 1925-26

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week, for a semester of 18 weeks. Credit for 64 units, or more, according to the course chosen, is required for a certificate.

Courses numbered from 1 to 99 and I to XCIX are freshman or sophomore (lower division) courses; those numbered from 100 to 199 and C to CXCIX are junior or senior (upper division) courses, available only, except by special arrangement, to students in the professional courses. Courses similar to those of the University of California are designated by the numbers used by the University.

ANTHROPOLOGY

Preparation for the major in Anthropology, Anthropology 1A, 1B.

1A. General Anthropology: Origin and Antiquity of Man HEWETT

Man as an animal; heredity; races and race problems; earliest culture.
Two units; one semester.

1B. General Anthropology: Origin and Development of Civilization HEWETT

The source and growth of institutions, art, customs, industries, language, and religion. Prerequisite: Anthropology 1A.
Two units; one semester.

103. Outlines of Culture Growth HEWETT

Human origins and classification; beginnings of culture; growth of civilization in the great centers of Egypt, Europe, and Asia; diffusions in Africa and Oceania; belated and marginal peoples; world religions and international contacts.
Three units; one semester.

104. Culture History of the Southwest HEWETT

Origin and culture of the Indians of the Southwest; their arts, customs, industries, beliefs.
Three units; one semester.

ASTRONOMY

Preparation for a major in Astronomy, Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-3B, Physics 2A-2B and 3A-3B or 1A-1B and 1C-1D, a reading knowledge of French or German.

1. Descriptive Astronomy SKILLING

This cultural course is planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are made. Especial attention is given to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with a six-inch Alvan Clark telescope is used for observation. Also a good selection of lantern slides is used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry.

Three units; second semester.

BOTANY

Preparation for the major in Botany, Botany 2A-2B, High School Chemistry or its equivalent.

2A. General Botany COY

A study of the fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.
Four units; first semester.

2B. General Botany COY

A continuation of 2A treating morphology and relationships of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Four units; second semester.

. California Plants

Coy

Lectures, laboratory exercises and field work on the classification and ecology of plants of the San Diego region. One lecture and two three-hour laboratory periods per week.

Three units; second semester.

CHEMISTRY

Preparation for a major in Chemistry, required: Chemistry 1A-1B, with a grade of C or better, Physics 2A-2B or 1A-1B, Mathematics C and 3A-3B, or their equivalents, and a reading knowledge of German. Recommended: Chemistry 6A-6B or 8-9, Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

A-1B. General Chemistry

PIERCE, SKILLING

The course is designed to give the student a thorough understanding of the fundamental principles and theories of Chemistry and their applications in everyday life, as well as to meet the requirements for further work along chemical lines. Three hours lecture and recitation and two laboratory periods per week. Prerequisite: High School Chemistry or High School Physics and Trigonometry.

Five units; throughout the year.

A-6B. Introductory Quantitative Analysis

PIERCE

The work consists of determinations by gravimetric, volumetric and electroanalysis, particular attention being given to the cultivation of laboratory technique. One hour of recitation and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Three units; throughout the year.

A-9. Organic Chemistry

PIERCE

A study of the carbon compounds and their derivatives, including the synthesis of different compounds and the proof of their constitution. A general application of the subject and the principles involved. Two lectures or recitations and one laboratory period, first semester; one lecture or recitation and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B.

Three units; throughout the year.

CONTEMPORARY CIVILIZATION

A study of the interests, activities and problems of the present with particular reference to intelligent citizenship; an orientation course planned to furnish a basis for further study and to develop a scientific attitude in the analysis and solution of problems in the field of human engineering. Lectures, discussions, quizzes, and collateral reading. Required of all freshmen. One and one-half units each quarter of the year.

A. Psychology and Philosophy

BELL

B. Economics and Sociology

A. G. PETERSON

C. History and Political Science

LESLEY

D. Recent Literature

OUTCALT

ECONOMICS

Preparation for a major in Economics, Economics 1A-1B and at least one of the following: Political Science 1A, 1B; History 4A-4B, 8A-8B; Psychology 2A, 2B; Geography 1 and 2. Recommended: Sociology 50, Accounting 14A-14B.

A. Social Ethics

COLDWELL

Required of all entering students. This course aims to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society—of men to society. One hour per week for 9 weeks.

1A-1B. Principles of Economics

A. G. PETERSON

A careful consideration is given to the basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wages, and profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs; transportation, corporations, labor problems, socialism, taxation, etc. The aim of the course is (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and (3) to introduce the future citizen to the political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Three units; throughout the year.

50. General Sociology

A. G. PETERSON

The object of the course in Sociology is twofold: To familiarize the student with the forces and laws under which society is formed, and to bring him so far as possible into touch with specific contemporary problems, so that he may adapt himself with greater facility to his responsibilities as a member of the social group and as a citizen. General Sociology includes the study of the antiquity of man, racial evolution, religion, morals, customs, laws, family and state, and the biological, economic and psychological aspects of society. Lectures, discussions, quizzes, with a text and collateral reading. Not open to freshmen. Prerequisites: Recommended: Economics 1A-1B, Biology 10A-10B and Psychology 2A-2B.

Three units; one semester.

145. Social Psychology

(See Psychology.)

149. Field Studies

A. G. PETERSON

Scientific methods of social and industrial field work and investigation; methods of securing data; classification, tabulation and interpretation of field work data. Each member of the class is required to assist in a survey of a definite field of work in co-operation with social and industrial organizations of San Diego and under the direction of the instructor in charge of the course. May be taken concurrently with Sociology 50. Prerequisites: Required: Sociology 50. Recommended: Psychology 2A and Economics 1A-1B.

One or two units; one semester.

18A-18B. Commercial Law

STANTON

The object of the course in Commercial Law is to give clearly and concisely the leading and fundamental principles of Business Law. Simple cases showing the actual application of the principles to commercial and business transactions are given, rather than development of those principles. The subjects covered are contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance and wills, with a brief study of evidence.

Three units; throughout the year.

1A-1B. Typewriting

GILLESPIE

A rapid development of a thorough command of the keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms; tabulation and billing; specifications; legal forms and preparation of manuscripts; transcription; mimeographing, etc. Ordinarily no credit is given for this course except in the curricula in Accountancy and Secretarial Training. Ten hours lecture and laboratory practice.

Four units; throughout the year.

2A-2B. Typewriting

GILLESPIE

A short course designed for those who do not wish to enter the business office but desire a knowledge of the use of the typewriter. Five hours laboratory practice. Ordinarily no credit is given for this course.

Two units; throughout the year.

1A-1B. Stenography

WRIGHT

An intensive course designed for the practical preparation of office secretaries. A thorough study is made of the Gregg System and the ability to read and write

shorthand rapidly and correctly, both literary and commercial, is developed. The shorthand speed necessary to pass a Civil Service examination is attained by the end of the year. Ordinarily no credit is given for this course except in the curricula in Accountancy and Secretarial Training.

Five units; throughout the year.

3A. Office Methods and Appliances

WRIGHT

Practice and principles of office management, including organization, arrangement and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and bookkeeping machines. Trips are made to local establishments to study at first hand actual business conditions. Prerequisite: Typewriting 1A or its equivalent.

Three units; second semester.

A. Business Mathematics

WRIGHT

A practical course in the Mathematics of Business. The ability to add, subtract and divide rapidly and accurately is developed. A thorough study is also made of interest, compound interest, discount, amortization tables, insurance rates, etc. Credit is given only in the curricula in Accountancy and Secretarial Training.

Two units; first semester.

14A-14B. Accounting

WRIGHT

A knowledge of bookkeeping is not required nor is it of advantage. A study is made of the balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions and consolidations; branch store accounting, etc., keeping in view the best modern accounting practice. Eight hours lecture and laboratory.

Four units; throughout the year.

160A-160B. Advanced Accounting

WRIGHT-EVERTS

The second year consists of an intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory.

Three units; throughout the year.

EDUCATION

I. Education—Introduction to the Study of Education

JOHNSON

This is the first required course in the study of education and has as its purpose the orienting of the mind of the student toward education and teaching. It includes a brief course in educational psychology, emphasizing a study of the learning process, and a survey of the objectives and established techniques in teaching and learning.

Three units for students who have had Psychology 2A; for others, four units; one semester.

II. Education—Methods in the Elementary School Curriculum

BELL, JOHNSON, HAMMACK

A brief study of the methods which are important in teaching the fundamental elementary school subjects. Collateral readings, class observations and demonstration lessons, with reports, will be required of all students. Prerequisite: Education I.

A) Primary. Three units; one semester.

B) Elementary. Two units; one semester.

VI. Education—Rural School Problems

COLDWELL

The distinct purposes of this course are:

1. To lead students to realize the actual conditions of rural life through their own observation and through the study of the literature dealing with the subject.
2. To discover what is being done to ameliorate rural conditions.
3. To ascertain the part the school should take in this work.

4. To formulate some definite ideas and plans as to the service a teacher may render her community, and to equip her with specific methods for rural school teaching.

Two units; one semester.

VIII. Education—Educational Measurements; Intelligence Testing: Theory and Practice BELL

A brief review of the history and rationale of intelligence testing is followed by a discussion of the Stanford revision of the Binet-Simon test, with demonstration and practice. The best group tests of intelligence are discussed and demonstrated. Experience in giving, scoring and interpreting results is required. The purpose of this course is to give teachers information on the subject, to enable each student to find out if by inclination and endowment he is fitted to do scientific testing and to put him in the way of becoming skilled in giving and interpreting intelligence tests.

Three units; one semester.

CI. Education—Principles of Junior High School Education* HARDY

This course deals with the principles of educational science that should underlie the organization, administration and curriculum of the secondary school, especially in the junior high school field. The prevailing patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to that of articulation of the secondary school with the lower and higher schools.

Two units; one semester.

CII. Education—Education for Citizenship HARDY, NIDA

The course deals with the effective methods and materials for Americanization of the foreign elements in our school population, with a study of American ideals as revealed in our history, literature and educational theory, and the objectives of American civilization.

Two units; one semester.

CIII. Education—School Law and Administration NIDA, HARDY

School administration as it affects the teacher, the school, child and the community; the system of public education in California; the evolution of public education in the United States. An upper division course, open only to students of junior certificate standing.

Two units; one semester.

CIV. Education—Psychology of Learning JOHNSON, BELL

This course is based upon a study of fundamentals in the experience of learning, and deals specifically with problems of learning in the fields of the social and natural sciences as they are applied in the elementary school.

Three units; one semester.

CV. Education—Growth and Development of Children JOHNSON, BELL

A study of the physical and mental growth of children through to early maturity. The special problems associated with puberty and adolescence are emphasized.

Prerequisite: Education I or Psychology 2A.

Two units; one semester.

CVI. Education—Principles of Education* JOHNSON, HARDY

This course is designed as a culmination of the studies of education and its procedure. It is designed to assist the student in establishing a philosophical interpretation and appraisal of education. In short, it is a brief course in the philosophy of education. Such topics as the following will indicate the scope of the course: The meaning and bearing of education. Education in a democracy. Socialization and social aspects of education. Problems of curriculum and of method. Creative education.

Prerequisites: at least Junior standing, courses Education I and II, and two hours of practice teaching or three years' experience in teaching.

Two units; one semester.

*Students wishing to qualify for the Junior High School Credential or for the Special Secondary School Credential may take Course CVI, Principles of Education, and a one credit course in Principles of Junior High School Education or in Principles of Secondary School Education. In this way they will comply with the requirements of the Commission of Credentials as published May 9, 1925.

CVII. Education—History of Education

BELL, HARDY

The course includes a brief study of early Hebrew, Greek, Roman and early Christian education, of the changes brought about by the Renaissance, of the transition to modern secular education, and includes brief reviews of the educational philosophies of the great reformers, together with a concluding study of the development of the American school system and of American ideals and practices in education.

Three units; one semester.

CVIII. Education—Educational Measurements

BELL

This course consists of a brief survey of the history of scientific measurement in the elementary field, and a study of the nature of intelligence tests, especially of the practical uses of group intelligence tests. The greatest stress, however, is laid upon the practical uses of achievement tests. The Stanford Achievement tests given to the entire training school and to many college students furnish a great part of the data used. Simple statistical training in handling data is acquired through practical problems.

Three units; one semester.

CIX. Education—Educational Administration

JOHNSON

A survey of the systems of organization, classification and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc.

Two units; one semester.

CX. Education—Educational Supervision

JOHNSON

A study of types of supervision and methods of evaluating and improving teaching.

Two units; one semester.

THE STATUTORY CURRICULUM

(Elementary School)

NOTE.—The courses listed under this head do not include reviews of elementary school subject matter. They are professional courses, and presuppose a reasonable mastery of the materials of the elementary school curriculum and of the general curriculum of the secondary school.

XI. Language

This course includes a study of the psychology and hygiene of reading, with a study of methods and materials suitable for the equipment of the elementary school teacher, and with a study, also, of the teaching of writing and spelling.

Two units; one semester.

XII. Mathematics

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics, together with study and observation of the newer methods as used under ordinary classroom conditions.

Two and one-half units; one semester.

XIII. Introduction to Geography

This course includes a study of the fundamental principles of geography and their adaptation to teaching geography in the elementary schools. Required of all students working for a teacher's elementary school certificate.

Two and one-half units; one semester.

XV. History

A course in the development of civilization beginning with ancient times, stressing the characteristics of successive periods and building a cultural background for the history of the elementary school.

Two units; one semester.

XVI. Music Coach

A course in the rudiments of music and in elementary theory; study of major and minor scales (three forms), intervals, correct notation, music terminology and

sight singing in one, two and three parts. Advanced students are excused from this course by special examination.

One-half unit; one semester.

XVII. Music—Elementary School Music

Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing, and part singing. Conducting. Prerequisite: Music XVII or its equivalent.

Two units; one semester.

XVIII. Art Coach

Study of fine examples of painting, architecture, sculpture and handicraft. Problems are intended to give a practical working knowledge of design and color theory.

One-half unit; one semester.

XIX. Art Methods

Prerequisite: Art I or its equivalent. This course is a practical application of the elements and principles of art to problems for grades 1-6. It is presented through lectures, reports, demonstration lessons and laboratory work.

Two units; one semester.

XX. Natural Science

The course aims to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades).

Two units; one semester.

XXII. Geography Material for the Elementary School

This course aims to familiarize the students with the various geographical readers, with the magazines valuable in the work, with the different kinds of wall and desk maps, and also with concrete geographical exhibits—all with reference to the elementary school, grades 3 to 6.

Two units; second semester.

XXVI. Agriculture

SKILLING

A course intended to acquaint prospective rural school teachers with modern methods used on the farm, in horticulture and animal husbandry. It will also help to equip those who teach general science in the city junior high school with material along the lines of ornamental horticulture. Greenhouse and garden work, and excursions to nurseries, florist shops and gardens, and to dairy and poultry ranches, will form an important part of the course.

Three hours; two units; one semester.

COURSES FOR SECONDARY SCHOOL TEACHERS IN THE JUNIOR HIGH SCHOOL FIELD

Organization and Administration (see Education CIII, CIX and CX)

CXI. English

OUTCALT, BAGLEY

This course consists of the following items: (a) Lectures, and required papers, on the objectives of secondary school work in English and on the selection and interpretation of materials; (b) of the study of methods with respect to pupil abilities and activities; (c) of observation of the work in the city schools.

Two units; one semester.

CXII. Mathematics

RICHARDS

The subject matter, management of it and methods of teaching it, in a junior high school curriculum in general mathematics, make up the principal topics of this course. Specific problems discovered include the application of arithmetic in current social and business life, intuitive geometry, graphic representation and the phases of

algebra suitable to the junior high school pupil, together with the problem of making the work useful in preparation for senior high school mathematics.

Two units; one semester.

CXIII. Geography

CLARK

This course deals, first, with the subject matter suitable for secondary schools, particularly the junior high school, and with the arrangement and interpretation of this subject matter; second, with the problems of teaching geography in the junior high school grades. Lectures, papers, readings and observations are included.

Two units; one semester.

CXIV. Social Science

PETERSON

This course for prospective junior high school teachers attempts to meet the problem of the teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography and civics. Methods of securing direct experience and training through suitable school and other survey and study projects, and of developing a genuine and continuing interest in social and civic problems through observation and reading, will be discussed and illustrated.

Two units; one semester.

CXV. History

LESLEY

A study of subject matter, organization, materials and methods for the teaching of history in the junior high school. The course includes a study of text books, maps, pictures and other material.

Two units; one semester.

CXIX. Art Methods

BENTON

Prerequisite: Art I and Art Methods II. This course is for the third year students working for elementary certification. It includes problems for grades 7, 8 and 9 and curriculum planning, and is presented in the same manner as Art Methods I.

Two units; one semester.

CXX. Biological Science

JOHNSON

The content of courses in elementary biology and the materials needed for illustration and study are considered in this course. Lectures, readings, student reports, class discussion, and observation will all contribute to an understanding of the problems involved.

Two units; one semester.

CXXI. Physical Science

BAIRD

This course deals with the major considerations in the teaching of the physical sciences in the secondary schools, and with the principal factors and materials in a good method of teaching general science in a junior high school both as preparatory for general education and for the advanced and specialized courses of the senior high school.

Two units; one semester.

CXXIII. General Science in the Junior High School

SKILLING

This course will deal with both the materials and the methods suitable for a course in the elements of the physical sciences, and will be conducted to meet the needs of junior high school teachers, through readings, class discussions and lectures.

Two units; one semester.

CXXIV. Romance Languages

BROWN

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods, their history and value.

Two units; one semester.

CXXV. Physiology

Cox

A study of the human body. Lectures and laboratory exercises on the physiology of the several systems of organs with emphasis on the applications to hygiene and physical education. A brief survey of human histology and a vertebrate dissection furnish the necessary facts of structure.

Two lectures and two three-hour laboratory periods per week.

Four units; first semester.

PHYSICAL EDUCATION FOR TEACHERS

LI. School Hygiene (Child Growth and Development)

TANNER

A course for professional students designed to acquaint them with the principles governing the growth and development of children and including:

The phenomena of reproduction, sex and the influencing factors of environment; prenatal and postnatal development; glands and internal secretion, their influences and reactions; growth periods; diseases, physical defects and health indices of school children; teaching of hygiene in the elementary school. Lectures, demonstrations, reports and discussions.

Texts:

"The Hygiene of the School Child"-----Terman

"Health Work in the Schools"-----Hoag and Terman

"Home and Community Hygiene"-----Broadhurst

Two units; one semester.

LII. Special Methods in Play Activities

TANNER

A study of play activities, including those centering about playground apparatus, hunting games, team games, singing games and folk dances. Methods of conducting large classes in mass and squad groupings are given particular attention. Carefully compiled note books are required that the student may possess graded and tested play materials.

One unit; one semester (abridged course for general certification).

Three units; one semester (course for special certification).

LIII. Administration of Physical Education Program in Elementary and Junior High Schools

TANNER, PETERSON

Materials and methods noted in the state program of physical education are studied. Emphasis is placed upon athletic tests, group activities under student leadership, the administration of the "relief" and play periods and the means of securing better postures. Standards and practices in health measurements as applicable to elementary school children, and the treatment of school emergencies are included. Lectures, demonstrations and individual study of important problems. Text: "State Manual of Physical Education"—Hetherington.

Two units; one semester.

CLI. Special Methods in Formal Activities

TANNER

(For Elementary and Junior High Schools)

a) A systematic study of the principles and technique of teaching physical training activities.

b) A study of the selection, classification, arrangement and progression of formal activities. The responsibility of the Physical Instructor toward the problems of age, growth, and sex variations as affected by exercise is stressed.

One unit; one semester.

For descriptions of the courses in biology, physiology, hygiene, etc., required for special certification in physical education, see those subjects in the list of general collegiate courses.

CLII. Theory of Teaching and Leadership in Physical Education

TANNER

A consideration of the elements and the teaching process in physical education; the application of psychology to leadership; the physical, mental and social equipment of the successful physical instructor.

One unit; one semester.

CLIV. Administration of Physical Education Program in Secondary Schools

PETERSON, TANNER

A study of interclass and intramural activities, with marked attention to methods of competition; consideration of games and sports (not specialized athletics) suited to the interest and physical needs of high school pupils; the relation of the instructor of physical education to the moral, social and hygienic problems of the high school.

Two units; one semester.

CLV. Practice Teaching

TANNER

Skill in teaching games, athletic sports, in the use of Decathlon Events and Fests and in gymnastic drills is expected. Training School and College classes are used in practice teaching. Prerequisites: Theory of Teaching and Leadership, a course in the Organization of Physical Education Program for the school group to be taught, and a course in Games.

Five units.

INDUSTRIAL ARTS

LXI. Elementary Industrial Arts

BENTON

Practical problems in the handling of industrial materials adapted to the grades, such as clay modeling and pottery, paper making, bookbinding, weaving, basketry, etc. Also the study of related subject matter and methods.

Three units; one semester.

LXII. Elementary Woodwork

SCUDDER

This course will show the possibilities of woodwork in the elementary grades. The reading of blueprints, the development of simple wood finishes, and study of the important woods form an essential part of the course. Shop work, demonstrations and lectures.

- a) Study of woods and their working qualities, paints and enamels, mixture and application, making various silhouette and mechanical toys.
- b) Tool operations and the application of constructional principles suitable for sixth and seventh grade work. An analysis of tools and principles involved. Care and adjustment of tools etc.

All projects adapted to grade work and classified by grades.

Three units; one semester.

LXIII. Advanced Woodwork

SCUDDER

Tool operations and the application of constructional principles suitable for eighth grade work. An analysis of tools and principles involved. Proper care and adjustment of tools. Attention is given to the various methods of assembling, and several different finishes are developed. Projects are to a large extent typical of the eighth grade and include original designs. Shop work demonstrations and lectures.

Three units; one semester.

LXIV. Industrial Arts—Cabinet Work

SCUDDER

Elementary cabinet work. Tool and machine operations involving mortise and tenon joints. At least one simple problem in upholstering. Proper use of various clamps in assembling. Excursions to study various types of furniture.

Three units; one semester.

LXV. Industrial Arts—Cabinet Work (advanced)

SCUDDER

Tool, machine operation and finishing processes naturally included in cabinet work are taught. Advanced finishing operations are demonstrated. Upholstering or caning must be included in this project. Study of fine cabinet woods and selection of the same.

Three units; one semester.

LXVI. Industrial Arts—Concrete Work

SCUDDER

This course includes the study of materials and their values in the different mixtures. The proper mixture of concrete for different purposes and simple reinforcement, as used in posts, beams, tanks, walls, etc. Each student will make practical application of the above in the laboratory by making small test beams and breaking

on small machine of compound levers, and by making a series of small useful and practical projects, as well as some larger class projects.

Two units; one semester.

CLXI. Industrial Arts Organization

SCUDDER

Classification of industrial arts from which men make a livelihood. General organization of material and its value, as well as methods of presentation. Classification of tools, tool operations and projects. Planning of courses from fifth grade through high school. Equipment costs and installation.

Two units; one semester.

NOTE.—For descriptions of the additional courses in special subject matter fields, required for special certification of the various types outlined under "Curricula for Special Certification," see the lists of courses under the head "Courses of Instruction."

ENGINEERING

C. Mechanical Drawing

STOVAL

This course is designed to train students in lettering and in neatness and accuracy in the use of instruments. Geometric problems, shop problems, theoretical objects with developments, warped surfaces with developments and penetration of two prisms, pyramid and prism, cylinder and prism, cone and cylinder, and other similar problems are studied. Mechanical Drawing C is substantially equivalent to the high school course in Mechanical Drawing.

Three units; either semester.

3D. Descriptive Geometry

STOVAL

In this course 21 or more plates are required and four examinations given. The plates deal with the customary problems of points, lines, planes, perpendiculars, parallels, distances, angles, solids, developments, warped surfaces, intersections, etc. The aim of the course is to create originality, and to develop the ability of the student to visualize and present on paper problems which are theoretical or practical. Prerequisite: Mechanical Drawing C or the high school course in Mechanical Drawing.

Three units; either semester.

6A. Machine Drawing and Design

STOVAL

Function of machines; motion, force, and work in machines; analysis of mechanism; velocity, acceleration, and effort diagrams; parallel motions, cams; ratchets; toothed wheels; valve gear and design. Three lectures and two drafting periods. Prerequisite: Descriptive Geometry 3D.

Five units; second semester.

1A-1B. Plane Surveying

STOVAL, LIVINGSTON

Use and adjustment of surveying instruments, computations and map-making, together with a study of land, topographic, city and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisites: Trigonometry and Mechanical Drawing.

Three units; throughout the year.

8A-8B. Pattern Making

SCUDDER

The aim of this course is to acquaint the student with as wide a variety of patterns as possible, in order to develop his knowledge of construction and broaden his view of the industries. Instruction is given in the principles of pattern construction, and the uses of the shrink rule, the finish allowance, draft allowance, fillet, etc. The correctness of design and necessity for the various allowances are proved by actual moulds and castings made from one-piece and split patterns. Excursions to pattern shops and foundries. Laboratory plan.

Two units; throughout the year.

1A-1B. Applied Mechanics

STOVAL

Problems concerning the action of external forces on rigid bodies; composition and resolution of forces; equilibrium; rectilinear and curvilinear motion; acceleration, linear and angular; harmonic motion; translation and rotation; moment of inertia; kinetic and potential energy; work, power, friction; machines; efficiency. Prerequisites: Mathematics 3A-3B and Physics 1A-1B.

Three units; throughout the year.

1. Elements of Electrical Engineering

STOVALL

A general survey of the field of Electrical Engineering. Single and polyphase circuits, power-factor, reactance, generators, motors, transformers, and transmission of power. Prerequisites: Mathematics 3A-3B and Physics 1C.

Three units; second semester.

ENGLISH

Preparation for a major in English—six units from English 1A-1B, and six units from 56A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

1A-1B. English Composition

BAGLEY, SMITH

The purpose of this course is to develop precision and directness in speaking and writing. A study of models, chosen from modern literature, forms the basis of class discussion and presentation. In 1A the emphasis is on exposition; in 1B on argumentation, description, and narration. Open only to students who have passed the English A examination.

Three units; throughout the year.

2A-2B. English Composition

BAGLEY

This course is designed to give constructive practice in correct and clear expression, both oral and written. Special emphasis is placed on the study of the sentence and the paragraph.

Three units; throughout the year.

4. Great Books

OUTCALT

A survey of books and bodies of literature that are primary sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic, Norse Edda, etc., and highly significant masterpieces in poetry and prose fiction. Lectures and required reading.

Two units; first semester.

50A-50B. The Drama

In this course typical works from the world's great dramatists are studied. The primary aim is a knowledge of the subject-matter of the plays, with an attempt to lay bare the fundamentals of Dramatic Art. Characters are studied and motives analyzed: The big significance of life as portrayed in the various plays is dwelt upon. The course includes the great Greek and Roman dramatists, selections from the French and Spanish, German and Scandinavian, and others, as well as chief contemporary American and English dramatists.

Two units; throughout the year.

52A-52B. Types of Literature

OUTCALT

Introduction to the study of lyrical and narrative poetry: origin and elements of poetry; typical poems.

Three units; first semester.

Introduction to the study of dramatic poetry and prose, the essay, novel and short-story: elements, principles and characteristics; examples.

Three units; second semester.

56A-56B. Survey of English Literature

BAGLEY

The aim of this course is to give the student a better acquaintance with great examples of English Literature which reveal the development of thought and social ideals from the Anglo-Saxon period to the middle of the nineteenth century. The work consists of readings in the masterpieces, class discussions, occasional quizzes, and written reports.

Three units; throughout the year.

60. Periodical Literature

OUTCALT

A study of current literature, in content and form, as presented by leading periodicals, with the purpose of promoting intelligence and discrimination in reading for immediate interest.

Two units; second semester.

101. Modern Prose Fiction

OUTCALT

A study of recent and contemporary fiction in drama, novel, and short-story, beginning with Meredith and including the best British and American fiction of today.

Three units; second semester.

117A-117B. Shakespeare

OUTCALT

Extensive reading of Shakespeare's plays, with special attention to a select group of the comedies and another of the tragedies. Lectures and special reports.

Three units; first semester.

121. Browning and his Contemporaries

OUTCALT

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

Three units; second semester.

130A-130B. American Literature

OUTCALT

A survey of American literature and its backgrounds from 1607 to the Civil War. Three units; first semester.

Recent American literature, with its backgrounds, from the Civil War to the present time, giving special attention to the development of prose fiction in the novel, short-story and drama.

Three units; second semester.

FINE ARTS

Preparation for the Major in Fine Arts—Art A, 1, 6A-6B, 12.

A-B. Freehand Drawing

BENTON, BIRD

Freehand drawing from objects and figure. Perspective, memory drawing and outdoor sketching. Mediums are charcoal, pencil, pen and ink and water color.

Two units; throughout the year.

1. Art History and Appreciation

BIRD

A study of architecture, sculpture, painting and handicraft from the dawn of art to modern art, through illustrated lectures, research and discussion. Prerequisite: Art 6A.

Three units; second semester.

6A-6B. Art Structure

BENTON, BIRD

Theory of design and color. Study of fine examples of painting and architecture, sculpture and handicrafts. The problems are intended to give a practical working knowledge of design and color.

Two units; throughout the year.

12A-12B. Advanced Design and Color

BIRD

12A—Problems in creative design presented in relation to materials and processes of application, such as wood block printing, batik, etc.

12B—Includes the application of design to posters, lettering and illuminating. Prerequisite: Art 6A-6B.

Two units; throughout the year.

52. Stage Craft

BENTON, BIRD

Theory of line, color and lighting studied in relation to stage effects. Study of the New Theater movement and its personalities. Miniature stages permit individual problems in settings, lighting and costume. The actual making of costumes and settings for a play produced by the Dramatic Society is the final problem. Prerequisite: Art 6A-6B.

Three units; second semester.

94A-94B. Costume Design

BIRD

94A—Design studied in relation to textiles and to modern dress for general and individual types. This course includes some drawing from costume models, sketching from costumes in the shops and original problems in costume design. Prerequisite: Art 6A-6B.

Three units; first semester.

94B—A study of the history of costume. Advanced problems in design are executed in materials. Some stitchery is included and processes of dyeing and dyeing. Prerequisite: 94A.

Two units; second semester. (Not offered in 1925-26.)

5A-95B. Home Decoration

BENTON

95A—Design in relation to the home. Planning, decorating and furnishing with emphasis on spacing, color and lighting. Study of furniture, floor coverings and textiles. Original problems in house planning and color elevations of rooms. Prerequisite: Art 6A-6B.

Three units; first semester.

95B—Takes up more intensive study of period styles and historic ornament. Original problems in designing furniture and fireplaces, and in selecting and combining textures. Prerequisite: 95A.

Two units; second semester. (Not offered in 1925-26.)

15A-115B. Life Drawing and Painting

BENTON, BIRD

115A—Pose drawing from the figure.

115B—Illustration.

Prerequisite: Art A-B.

Two units; throughout the year. (Not offered in 1925-26.)

FOREIGN LANGUAGE

Preparation for a major in a Foreign Language. Required: 16 units of credit in the language chosen for the major. Recommended: History 4A-4B.

Elementary German

Pronunciation, Reading and Grammar, with practice in simple conversation, narration, and description, both oral and written.

1. Elementary German

HEIMERS

Five units; first semester.

2. Elementary German

HEIMERS

Prerequisite: German A or two years of the high school course in German, or its equivalent.

Five units; second semester.

Intermediate German

Selections from prose and poetry, ordinarily including one of Schiller's dramas; grammar and composition. The course is conducted in German and furnishes the regular preparation for the upper division courses.

3. Intermediate German

HEIMERS

Prerequisite: German B or three years of the high school course in German.

Three units; first semester.

4. Intermediate German

HEIMERS

Prerequisite: German C or four years of high school course in German.

Three units; second semester.

5C-SD. Scientific German

HEIMERS

Reading course in scientific German.

Prerequisite: German B or three years of the course in high school German.

Three units; throughout the year. (Either this course or Intermediate German will be offered in 1925-26.)

Elementary French

Intensive study of French Grammar and Syntax; daily written work discussed in class; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of French Prosody, with memory work.

A. Elementary French

HEIMERS

Five units; first semester.

B. Elementary French

HEIMERS

Prerequisite: French A or two years of the high school course in French, or its equivalent.

Five units; second semester.

Intermediate French

Reading and composition; study of standard prose as a basis for class work; collateral reading with résumés and written reports in French; study of French Prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences.

C. Intermediate French

HEIMERS

Prerequisite: French B or three years of the high school course in French, or its equivalent.

Three units; first semester.

D. Intermediate French

HEIMERS

Prerequisite: French C or four years of the high school course in French, or its equivalent.

102A-102B. Introduction to French Classics

BROWN

Prerequisite: French D, or its equivalent.

Three units; throughout the year. (Not offered in 1925-26.)

Elementary Spanish

Intensive study of Spanish Grammar and Syntax, with daily written work; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of Spanish Prosody, with memory work.

A. Elementary Spanish

BROWN

Five units; first semester.

B. Elementary Spanish

BROWN

Prerequisite: Spanish A or two years of the high school course in Spanish, or its equivalent.

Five units; second semester.

Intermediate Spanish

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; a study of Spanish Prosody, with selections for memorizing; dictation. Class work conducted mainly in Spanish. Individual conferences.

C. Intermediate Spanish

BROWN

Prerequisite: Spanish B or three years of the high school course in Spanish, or its equivalent.

Three units; first semester.

D. Intermediate Spanish

BROWN

Prerequisite: Spanish C or four years of the high school course in Spanish, or its equivalent.

Three units; second semester.

102A-102B. Introduction to Spanish Classics

BROWN

Prerequisite: Spanish D, or its equivalent.

Three units; throughout the year. (Not offered in 1925-26.)

105A-105B. Spanish Drama

BROWN

This course will trace the development of the drama in Spain from the beginning of the nineteenth century to the present time.

Prerequisite: Spanish D, or its equivalent.

Three units; throughout the year. (Not offered in 1925-26.)

10A-110B. Novel and Short Story in Spain

BROWN

This course will trace the development of the novel and short story in Spain from 1830 to the present time.

Prerequisite: Spanish D, or its equivalent.

Three units; throughout the year.

GEOGRAPHY

Preparation for the major in Geography, Geography 1 and 2.

1. Introduction to Geography: Elements

CLARK

This course deals with the fundamental principles of geography, with the distribution of life upon the earth and with the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and location are related to human activities. Open to all students. Given in alternate years beginning 1924-25.

Three units; first semester.

2. Introduction to Geography: Natural Regions and the Distribution of Population and of Cultures

CLARK

This course applies the fundamental principles of geography to the various regions of the world. The regions are compared with regard to different stages of development. Prerequisite: Geography 1 or Geography 1A. Given in alternate years beginning 1924-25.

Three units; second semester.

3. Elementary Meteorology

A study of the earth's atmosphere and the changes in it which produce our weather and influence human affairs.

Three units. (Not offered in 1925-26.)

4. Map and Instrument Study of Weather and Climate

The making and recording of meteorological observations; practical work with meteorological instruments and a study of weather and weather maps.

Two units. (Not offered in 1925-26.)

116C. Europe

CLARK

This course deals with the physical environment of each of the nations and their reactions to physical environment in their political and social relations. It is planned so as to be of value to all students who wish to familiarize themselves sufficiently with modern Europe to be able to read current periodical literature with interest and understanding. The course introduces the students to the smaller as well as to the larger of the European countries.

Three units; first semester.

116D. South America

CLARK

This course deals with the climate, topography and natural resources of the South American countries, and with the effect of those physical factors upon the economic, commercial and racial problems of the different nations.

Three units. (Not offered in 1925-26.)

117C. Europe—Advanced

CLARK

This course follows Geography 116C or its equivalent and stresses the economic problems of the European countries. Special stress is laid on those countries which occupy, at present, the more important places in the world's affairs.

Three units; second semester.

141. Introduction to Economic Geography

CLARK

This course includes a study of the economic activities of nations and peoples as influenced by geographical factors, with a study of present-day problems in the field of the subject. Required for special certification for teaching the commercial subjects in the junior high schools. Given in alternate years beginning 1924-1925.

Three units; second semester.

HISTORY

Preparation for the major in History, History 4A-4B or History 8A-8B, and either Political Science 1A-1B or Economics 1A-1B.

4A-4B. History of Modern Europe

LESLEY

The growth of western European civilization from about 1500 A.D. to the present time. An introduction to the study of history, affording a general perspective of the development of society, politics and institutions in Europe. The first half-year's work extends to the Congress of Vienna. A textbook and syllabus are used. Two lectures and one quiz section each week.

Three units; throughout the year.

8A-8B. History of the Americas

LESLEY

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis is placed on the planting of European civilization in the western hemisphere, the growth of the colonies of various nations, the international contest for the continents, the wars of independence in English-America and Hispanic-America, the development of the American republics, and their relations with each other and with the rest of the world. This course is based on Bolton, Syllabus of the History of the Americas. Two lectures and one quiz section each week.

Three units; throughout the year.

122. Medieval Culture

LESLEY

An intensive study of the development of thought from 500 A. D. to about 1300 A. D., with special emphasis upon the twelfth and thirteenth centuries. This course will be based on Paetow, Guide to the Study of Medieval History, part III. Open only to upper division students.

Two units; first semester.

172. History of the United States Since 1865

LESLEY

A survey of the recent political, social and economic development of the United States, with emphasis upon the American participation in the World War. Open only to upper division students.

Two units; second semester.

HOME ECONOMICS

HOUSEHOLD ART

Preparation for the major in Household Art required: High school courses in Botany and Chemistry or equivalents; Household Art 1A-1B; Art 6A-6B; History 4A-4B; Economics 1A-1B; or equivalents. Recommended: Art 12, Psychology 2A-2B, French or German. High school courses in clothing, freehand and mechanical drawing.

1A. Clothing

LANDERS

A study of clothing problems. The hygiene, artistic and economic aspects of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: One year of high school sewing, or equivalent, Art 6A. Art 6A may be taken concurrently with this course.

Three units; first semester.

1B. Clothing and Costume Design, Textiles

LANDERS

A study of costume design with lectures on artistic appreciation, color and materials. Textile study includes a survey of textile fabrics, chemical and physical test. Application of principles to the selection and construction of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: Clothing 1A, or equivalent, high school Chemistry or Chemistry 1A, Art 6B. Art 6B may be taken concurrently with this course.

Three units; second semester.

2A. Home Making

COLDWELL

A general view of the place of the home in society. Administration of the household. Budgeting of incomes to cover shelter, food, clothing, savings and social life. Field work, assigned reading and theme writing required. Lectures, class discussion, recitations.

Two units; either semester.

3. Millinery

LANDERS

Making of hats, frames, trimmings, etc. Application of principle of design. Prerequisite: Art 6A. Art 6A may be taken concurrently with this course. Recommended: Art 6B.

Two units; one semester.

HOUSEHOLD SCIENCE

Preparation for the major in Household Science, Household Science 1A-1B, Chemistry 1A-1B, 8, Bacteriology 1.

1A. Food Economics

LANDERS

Principles of selecting and preparing foods. A study of composition, production, preservation, nutrition value, digestibility, flavor and cost of foods. One lecture or recitation and two laboratory periods per week. Prerequisites: One year of high school cooking, or equivalent, Chemistry 1A. Chemistry 1A may be taken concurrently with this course.

Three units; first semester.

1B. Food Economics

LANDERS

Principles of diet applied to individual family and special group. The planning and serving of meals. One lecture or recitation and two laboratory periods per week. Prerequisites: Food Economics 1A or one year of high school cooking, high school chemistry or Chemistry 1A.

Three units; second semester.

2. Dietetics

LANDERS

An analysis of food with special reference to needs of special group. Prerequisites: Food Economics 1A-1B, Chemistry 1A-1B, Organic Chemistry 8 (to be taken concurrently with this course), Bacteriology 1.

Two units; one semester.

HYGIENE

1. Hygiene and First Aid

C. E. PETERSON

An informational course in personal and community hygiene required of all men in the freshman year in the Junior College. The course includes a study of Sex Hygiene and of the Hygienic Principles of Exercise, Bathing and Sleep. Civic Hygiene is vitalized through investigations by each student of special topics, the means by which the health of the local community is protected and improved, providing subjects for special study. Lectures, reference reading, special topics, discussions, oral and written quiz.

One unit; either semester.

2. Hygiene and First Aid

TANNER

An informational course reviewing the principles underlying the improvement and preservation of personal and civil health. Social Hygiene is studied in its relations to the practical problems of young women and prospective homemakers. The laws and procedure in local civic health matters of particular interest to women are studied in detail. Reports following personal investigation of at least three major topics are required for each member, these reports being given and discussed before the class. Required of all women in the freshman year in the Junior College.

Two units; either semester.

JOURNALISM

51A. News Gathering and Reporting

F. L. SMITH

Study of news sources and practice in news writing. Newspaper organization. Three units; first semester.

51B. News Editing and Correspondence

F. L. SMITH

Practice in copy-reading. Study of news values and types of newspaper stories. Three units; second semester.

MATHEMATICS

Preparation for the major in Mathematics, required: Mathematics 3A-3B and 4A-4B. Recommended: Physics 2A-2B or 1A-1B and a reading knowledge of French and German.

A. Algebra

Course A is substantially the equivalent of the high school course in algebraic theory. It includes: a brief review of the fundamental operations, factoring, powers and roots, logarithmus, graphs, solution of equations, the binomial theorem, progressions, permutations and combinations. Prerequisites: Elementary Algebra and Geometry.

Three units; first semester.

C. Trigonometry

Course C includes the usual high school course in Trigonometry, but gives more attention to trigonometric identities and equations. The usual trigonometric formulæ are developed and used in the solution of triangles. Logarithmic computation is explained and used. Prerequisite: Mathematics A or its equivalent.

Three units; second semester.

1A-1B General Course

LIVINGSTON

The course begins with the solution of simple problems by graphical methods; then by the more exact methods of differential and integral calculus. The work in calculus is later extended to problems in Trigonometry and Analytic Geometry, the essentials of these subjects being presented as needed. Incidentally there is an adequate treatment of the topics usually presented in advanced high school Algebra. This course should give at least a general view of those processes in Mathematics which are so necessary to the solution of problems in the exact sciences and which are proving a valuable aid to students of Social Science and Business Administration. It is intended primarily for nonengineering students. Prerequisites: Elementary Algebra and Geometry.

Three units; throughout the year.

2. Mathematics of Investment

WRIGHT

An application of Algebra to interest and annuities, including equation of value, amortization, sinking funds and depreciation, and life annuities. The course shows the value of generalizing business problems by means of formulæ, provides drill in the use of tables, and strengthens the student's ability to do accurate work in the fundamental operations of Arithmetic. Prerequisite: Mathematics A and C or their equivalents, or Mathematics 1A-1B.

Three units; first semester.

Elements of Analysis, with Applications

A two-year course in Algebra, Analytic Geometry, and Calculus, intended primarily for studies in Engineering and Chemistry.

3A-3B. Plane Analytic Geometry and Differential Calculus

LIVINGSTON

Prerequisites: Mathematics A and C or their equivalents.
Three units; throughout the year.

4A-4B. Solid Analytic Geometry and Integral Calculus

LIVINGSTON

Prerequisite: Mathematics 3A-3B or its equivalent. The high school course in Solid Geometry is also strongly recommended.
Three units; throughout the year.

3. Projective Geometry

LIVINGSTON

The course includes the construction and study of conic sections and certain other curves, by means of perspectives, poles and polars, involutions and inversions. Prerequisites: Elementary Algebra and Plane Geometry.

Three units; second semester.

MUSIC

The primary aims of the various music organizations are to give the students participating, and incidentally the entire college student body listening, an added love for and knowledge of the best in Choral and Orchestral Music. Added to this are the cultural advantages to be gained, the ability to read and perform good music, the mind training in the necessary concentrating upon the wishes of a conductor, the poise which comes with appearing before public audiences, the promotion of college spirit, the enriching of student and college activities, and the great pleasure and ennobling effect of artistic expression through music.

1A, B, C, or D. Treble Clef Club

L. D. SMITH

One-half unit; either semester.

1A, B, C, or D. Male Chorus

L. D. SMITH

One-half unit; either semester.

1A, B, C, or D. Choral Club

L. D. SMITH

One-half unit; either semester.

1A, B, C, or D. Orchestra

DU LANEY

One-half unit; either semester.

3. History and Appreciation of Music

L. D. SMITH

Development of primitive systems; mediaeval music; the school of counterpoint; history of oratorio and opera; the rise of classic forms. A study of the works of the composers of the classic and romantic periods. Illustrations, lectures and reports.

Three units; second semester.

PHYSICAL EDUCATION

Preparation for the major in Physical Education, required: High school Chemistry, Biology 10A-10B, Physiology 1, Bacteriology 1, Economics 1A-1B, Psychology 2A-2B. Recommended: German or French, Public Speaking 1A-1B.

Physical Education for Men

C. E. PETERSON

A two-hour course required for the two years of Junior College work. Physical examination is given each student when entering and special attention is given to correcting postural faults. In addition to the body building work given in the class periods, physical efficiency tests embracing agility, defense and swimming are given each semester. During the two years a playing knowledge of the major and minor sports is given and fundamentals of boxing and wrestling taught each student.

1A, B, C or D. Physical Education. One-half unit; throughout the year.

13A or B. American Football. One-half unit; first semester.

3A or B. Track. One-half unit; second semester.

4A. Baseball. One-half unit; second semester.

5A or B. Basketball. One-half unit; second semester.

6A or B. Tennis. One-half unit; either semester.

7A or B. Boxing. One-half unit; either semester.

8A or B. Wrestling. One-half unit; either semester.

10A, B, C or D. Swimming. One-half unit; either semester.

Physical Education for Women

TANNER, RAW

Students are given a health and physical examination, the physical activities prescribed being based upon the data thus obtained. Two hours weekly of directed Physical Training are required of all women students, the chief purpose being to develop a knowledge of and interest in suitable sports and games, that habits of vigorous exercises may be promoted.

Intra-mural sports are encouraged, particularly those of inter-class nature.

52A-52B. Physical Education

Prescribed courses for freshmen in the Junior College.
One-half unit; throughout the year.

52C-52D. Physical Education

Prescribed courses for sophomores in the Junior College.
One-half unit; throughout the year.

PHYSICS

Preparation for the major in Physics, required: Physics 2A-2B and 3A-3B, with a grade of B, or Physics 1A-1B and 1C-1D; Chemistry 1A-1B; Mathematics C, 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

1A-1B. General Physics

BAIRD

Mechanics, properties of matter, and heat. This course aims at a development of the fundamental ideas which underlie the subject of Physics, and the application of them in the discussion of practical problems. The work is presented in lectures, text assignments, problem sets and experimental laboratory work. Two lectures and one laboratory period each week. Prerequisites: Physics 2A-2B and 3A-3B or high school Physics; three years of high school Mathematics, including Trigonometry.

Three units; throughout the year.

1C-1D. General Physics

BAIRD

This course is a continuation of Physics 1A-1B for students in the sophomore year, and includes magnetism, electricity, sound and light. Two lectures and one laboratory period each week.

Three units; throughout the year.

2A-2B. General Physics

BAIRD

Properties of matter, mechanics, heat, sound, light, electricity and magnetism. A non-engineering course. Lectures, demonstrations, and discussions. Prerequisite: High school advanced Algebra or high school Physics, or equivalents.

3A-3B. Physical Measurements

BAIRD

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity and magnetism. These exercises are usually taken in conjunction with Physics 2A-2B.

One unit; throughout the year.

PHYSIOLOGY

Preparation for the major in Physiology, required: Zoology 1A-1B or Physiology 1, Physics 2A-2B and 3A-3B, Chemistry 1A-1B and S-9. Recommended: German and French.

1. Introductory Human Physiology

The structure and functions of the human body, to give a general conception of the relationship of the human body to its environment. Three lectures or recitations; two laboratory periods per week. Prerequisite: At least one of the following: Zoology 1A-1B, Biology 10A-10B, Chemistry 1A-1B or 2A-2B and 3A-3B.

Five units; first semester. (Not offered in 1925-26.)

POLITICAL SCIENCE

Preparation for the major in Political Science, Political Science 1A-1B and Economics 1A-1B or History 4A-4B. High School civics is presupposed in the following courses.

1A. Comparative Government

LESLEY

The government and parties of Great Britain and her self-governing dominions of France, of Belgium, and of Italy.

Three units; first semester.

B. Comparative Government

LESLEY

The governments of Germany, Switzerland, Austria, and the United States.
Three units; second semester.

01. Constitution of the United States

This course is planned to meet the requirements of the state law for the certification of teachers. The origins, principles and development of the Constitution.
Two units; one semester.

PSYCHOLOGY

Preparation for the major in Psychology, required: Psychology 2A and 2B, Psychology 1A-1B, or Biology 10A-10B. Recommended: French, German, Chemistry, Physics.

A. General Psychology

BELL

A study of the modern scientific interpretation of the facts of consciousness; their relation to each other, to their external stimuli, and to the nervous system.

The aim is (1) to increase the student's understanding of himself and to contribute to his intelligent, discriminating reading of current popular and scientific literature; and (2) to give a definite and necessary basis for advanced work in psychology.

Three units; first semester.

B. Applied Psychology

BELL

A general survey of the results of modern Psychology applied to self-improvement, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in these fields between scientific, legitimate Psychology and the Pseudo-Psychology that is popular because of its simplicity and plausibility or because of its mysticism.

Three units; second semester.

45. Social Psychology

W. JOHNSON

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, the crowd, public opinion, social control, etc. Prerequisite: Sociology 50 or Psychology 2A.

Three units; second semester.

PUBLIC SPEAKING

Preparation for the major in Public Speaking, Public Speaking 1A-1B or English A-1B, Public Speaking 2A.

A-1B. Elements of Public Speaking

LANE

Training in fundamental processes; organization and arrangement of material; outlining; practice in the construction and delivery of type forms of speech.

Three units; throughout the year.

A. Elements of Expression and Interpretation

LANE

A study of the laws governing correct voice production. The essentials of effective oral interpretation. Practice in reading and speaking.

Three units; first semester.

18-A. Art of Acting: Theory and Practice

LANE

The psychology of acting; the cultivation and development of the dramatic instinct through character portrayal. Study and presentation of selected one-act plays. Open to all students who have the permission of instructor.

Three units; second semester.

ZOOLOGY

Preparation for a major in Zoology, required: Zoology 1A-1B and high school Chemistry or Chemistry 1A. Recommended: French, German, and Biology 10A-10B.

1A. Zoology

JOHNSON

An introduction to animal biology dealing with structure, functions and evolution of animal life. The laboratory work supplements the lectures and is based on the study and observation of living and preserved material. The course will acquaint one with the fundamental facts and theories of biology as they pertain to animal life. It is valuable to the general student as well as to the biology specialist. Three lectures or recitations and two three-hour laboratory periods per week.

Five units; first semester. (Not offered in 1925-26.)

1B. Zoology

JOHNSON

A continuation of 1A. The first half of the semester is given to the study of the structure and behavior of the chordates, with a detailed dissection and study of the shark. The second half is devoted to the study of the early development of the various types of animals, especially the chick. The course deals with the higher animals, the vertebrates, thus supplementing the work of the first semester. The detailed dissection of the shark and the careful study of the developing chick give the student a good basis for further work in medicine, agriculture, or zoology, and furnish as well a good biological background for students in any line of work. Three lectures or recitations and two three-hour laboratory periods per week.

Five units; second semester. (Not offered in 1925-26.)

10A-10B. Biology

JOHNSON

The fundamentals of plant and animal biology, with elementary work in heredity, evolution and eugenics. The laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the general student with the basic facts of biology. It is designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures or recitations and one three-hour laboratory period per week.

Three units; throughout the year.

101. Seashore Biology

JOHNSON

Illustrated lectures deal with the more common animals that are to be found at nearby beaches. The life history, habits, and distribution of our more conspicuous shore animals are considered. Students will have the opportunity to get acquainted with the living animals both at the beach and in the laboratory. This course may be taken alone or concurrently with 10A-10B. One hour lecture per week and trips to the beach as opportunity offers.

One unit; one semester.

114. Heredity and Evolution

A discussion of the facts of heredity, in plants, animals and man; the Mendelian law and its application; development of theories of evolution. Reports on assigned topics are required. The course is designed to make the student familiar with some of the current literature and opinions of scientists concerning heredity and evolution. Prerequisite: Biology 10A-10B or Zoology 1A-1B or Botany 2A-2B.

Three units; first semester. (Not offered in 1925-26.)

115. Eugenics

A study of Human Heredity and Eugenics. Assigned readings and reports. The aim of the course is to acquaint the student with current literature on the subjects of Eugenics, including investigations that have contributed data on the subject. Prerequisite: Heredity and Evolution 114.

Two units; second semester. (Not offered in 1925-26.)

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SACRAMENTO, 1925

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FALL 1926



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ADMINISTERED THROUGH
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EVANGELINE SPOZIO, A.B.	Education
CLARENCE R. STONE, M.A.	Education
OLIVE THOMPSON, M.A.	Social Science
P. F. VALENTINE, M.L.	Psychology

CALENDAR

FALL SESSION:

Instruction will begin the week of September 13, 1926.

SPRING SESSION:

Instruction will begin the week of February 7, 1927.

Classes will not be held on regular school and legal holidays.

GENERAL INFORMATION

Afternoon and Evening Sessions

During the middle of each semester, courses are organized for teachers of the bay region. These courses are planned to meet the requirements for the B. A. degree in Kindergarten-Primary, Elementary, or Junior High School Education. The work outlined in this bulletin will continue for a period of twelve weeks in the fall session, giving one unit of credit. Most of the courses will continue in the spring semester, giving the second unit.

Units

A unit is hereby defined to be a course of study of one full period of prepared class work a week, or if a laboratory subject, of at least two periods a week, taken for not less than eighteen weeks.

Registration

Registration for classes may be made on the day of *first* meeting.

No registration may be made *after* the *second* meeting of the class.

Appointments for advice regarding adjustments and programs should be made with the Registrar between September 3 and 13.

Fees

The fee will be \$4.00 per unit, payable to the San Francisco State Teachers College. Auditors must pay the regular fee. Students who pay an additional \$2.00 per year may have the privilege of the library.

Records

Students wishing transcripts of record for work completed should file a self-addressed stamped envelope with the registrar one week prior to the close of the session.

GENERAL REQUIREMENTS FOR B.A. DEGREE

	Units
Physical Science -----	6
Biological Science -----	6
Social Science -----	12
(Including History, Geography, Economics, Constitution, Sociology.)	
Psychology -----	6
English -----	6
Physical Education -----	6
Practice Teaching (minimum) -----	10
Principles of Elementary Education -----	2
Public School Education in California -----	2
Education for Citizenship -----	2
Objectives in Education -----	3
Educational Psychology -----	3
Two Group Electives of at least 12 units each -----	24
Free Electives (number depending on student's back- ground).	-----
Total for degree -----	124

NOTE I.—A student entering a State Teachers College without two years of mathematics (other than arithmetic) and two years of one foreign language must complete (before he receives the baccalaureate degree) one year (six units) of mathematics and one year (ten units) of a foreign language.

NOTE II.—Not more than forty units of Education in the combined upper and lower divisions of the four-year curricula are allowed.

APPOINTMENTS:

Appointments with Miss Crumpton concerning adjustment of credits toward degrees may be made by phone, Park 2923, September 3 to 13.

Address all inquiries to the Registrar, Miss Clara Crumpton, State Teachers College, San Francisco.

DESCRIPTION OF COURSES

†Courses to be used for Administration Credential.

ART

5. ART APPRECIATION

Mayer

This course is planned not only to teach the appreciation of all types of art but also, through the historical and esthetic approach, to formulate for the student those criteria by which works of art may best be judged.

Classes will be held at the college where the study will be carried on with the use of lantern slides, photographic and other reproductions; also at the museums and art galleries where originals can be seen and studied. The class will be taken to any place within reach of the group where appreciation of art may be gained.

Fall semester

1 unit

BIOLOGICAL SCIENCE

7. NATURE STUDY

McFadden, Reid

A course designed to familiarize the student with the names and activities of the common plants and animals of his environment; to establish ease in handling nature materials for children; and to give an added appreciation of outdoor recreation.

Fall semester

1 unit

Spring semester

1 unit

12. PUBLIC HEALTH

Barney

This course will deal with the demonstrable scientific facts relating to the prevention of disease, and with a brief outline of the men who have achieved renown in this great work.

At no time in the world's history has there been such widespread recognition of the importance of Public Health to the welfare and happiness of the people, as in this twentieth century. It is the one subject which is truly international and can be discussed without acrimony, political deceit, or hostility, as "keeping well" is the concern of all the peoples of the earth.

Fall semester

1 unit

EDUCATION

1. PRINCIPLES AND PRACTICE OF ELEMENTARY EDUCATION

Hahn

This course will deal with the principles, aims, and current practice in the education of young children. Special problems of classroom adaptations to the growth of children from four to nine will be discussed. Possible approaches to spoken and written language, reading, and number will be discussed and demonstrated. The principles underlying work with materials will be stressed and examples of work from classrooms used. On account of the large numbers desiring to take this course, no auditors will be permitted.

Fall semester	1 unit
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Spring semester	1 unit
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*2. EDUCATION FOR CITIZENSHIP

Thompson

This course is designed to promote intelligent citizenship. Attention will be given to current problems and the relation of education to them. Citizen activities will form the basis of a citizenship curriculum, involving modern educational principles and practice. Students will work on projects related to the citizenship values of their particular teaching experience.

Fall semester	1 unit
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Spring semester	1 unit
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*19. THE TEACHING OF THE SOCIAL STUDIES

Thompson

The teaching of history, geography, and civics will be considered as separate problems, as well as one problem—the unified social studies curriculum. Attention will be given to curriculum reorganization based upon activities, as well as to the modern methods of presentation. Examination of actual courses of study, the use of projects, provisions for current events, the evaluation of tests, and other aids to the use of state texts, will offer practical aid to the teacher. Special work on the use of social science pamphlets will be given if desired.

Fall semester	1 unit
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Spring semester	1 unit
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* Only one of these courses will be organized—the one for which there is the greater demand.

†8. EDUCATIONAL TESTS AND MEASUREMENTS

Spozio

A practical course dealing with the use and interpretation of educational tests and scales.

Fall semester 1 unit

Spring semester 1 unit

15. VISUAL INSTRUCTION IN PUBLIC SCHOOLS

Dorris

This course deals with modern classroom procedure and the fundamental reasons underlying the use of all types of visual materials—such as exhibits, flat pictures, graphs, maps, stereographs, slides, and motion pictures—in teaching the various subjects of the curriculum. Special attention is given to sources of supply, care, and use of all visual instruction equipment. It is designed to meet the needs of principals and classroom teachers and also offers an opportunity for specialization in this new problem in education. Additional credit may be granted for laboratory work in classrooms.

This course may be used for the supervision credential.

Fall semester 1 unit

†22. SCHOOL ADMINISTRATION AND SUPERVISION

Butler

This course will aim to show the student how our school systems—city, county, state, and federal—actually work.

The relations between teachers, supervisors, principals, superintendents, and school boards, with the proper work and responsibilities of each will be considered. The course will aim not only to prepare teachers for administrative work but also to give an intelligent conception of the system in which they will work.

Fall semester 1 unit

Spring semester 1 unit

34. NEW METHODS IN SILENT READING FOR MIDDLE AND UPPER GRADES

Stone

This course will deal with special plans for extending and enriching experience through reading; establishing permanent, varied, and desirable interests in reading; inculcating fundamental behavior attitudes and ideals through reading; and cultivating attitudes, skill, habits, and abilities essential to efficient silent reading. Special attention will be given to

illustrations of a variety of types of silent reading lessons. Demonstrations with classes will be given from time to time. Problems of measurement, diagnosis, classification, and remedial instruction will be considered.

Fall semester

1 unit

If the student carries on in her own classroom some experiments in testing and teaching and making reports on the same, she may earn an additional unit in this course.

†37. THE SUPERVISION OF INSTRUCTION

Fratis

This course will deal with the principles, aims, and practical aspects of everyday supervision of classroom instruction. The organization of supervision; standards for improvement of teaching; classroom visitation; helping the teacher; the place of demonstration teaching; cases and problems in the criticism of teaching; supervisory routine; personal problems—all will be discussed. Lectures, text, assigned reading, and discussion.

Fall semester

1 unit

†38. THE WORK OF THE ELEMENTARY SCHOOL PRINCIPAL

Cloud

Historical background with emphasis upon recent trends; official relationships; supervisory and administrative functions; preparation, training, and other qualifications; theory; practice. Lectures; readings; reports; discussions.

Fall semester

1 unit

ENGLISH

8. CREATIVE COMPOSITION FOR INTERMEDIATE GRADES AND JUNIOR HIGH SCHOOLS

Gorman

This course will deal with special ways and means for extending and enriching the experience of boys and girls through written and oral expression. Developing self-expression and a creative return from the child in written form through the appreciation of literature will be the point of emphasis in the course. Classroom procedure and practice will be provided in a group of children from the training school. This will be in the nature of demonstration work with the consideration of such problems as: Grammar, simple

rules of rhetoric, and story technique used as *tools* in writing original stories, poems, and plays; the school newspaper and its possibilities; appreciation and evaluation of juvenile literature, with a consideration of the new writers and poets for children. Suggestions and methods for working out these problems will be shown through such activity-projects as Story Writers' Club, Press Club, and Book Readers' Club, etc.

Fall semester 1 unit

Spring semester 1 unit

29. SELF-CULTIVATION WITH BOOKS *Lehman*

An analysis of the Good Reader and the Bad Reader. The steps of self-cultivation in reading, from the simpler biographical works through the narrative and lyric types, to the more difficult dramatic and meditative writings. A new array of significant books and authors.

Fall semester 1 unit

PHYSICAL SCIENCE

7. THE STORY OF THE STARS *Mundt*

A general survey of the field of astronomy, including a study of the solar and sidereal systems. In the latter due attention will be given to all phases of the study of the stars; star clusters; spectral types; stellar dimensions; the nebulae; the new universe.

Fall semester 1 unit

13. A TEACHERS' COURSE IN GENERAL SCIENCE *Biddle*

A course for teachers of general science, presenting particularly methods of developing the subject. The work will be based on one of the standard texts and will be supplemented by the study of others. Special emphasis will be placed on the selection and performing of suitable experiments, material for which, as far as possible, will be drawn from readily accessible sources.

Illustrative experiments will be presented by the members of the class, and these in part will serve as a basis of discussion of the matter under consideration.

Prerequisite: Physical Science 1 and 2, or High School Chemistry.

Fall semester 1 unit

PSYCHOLOGY

†7. GROWTH AND DEVELOPMENT OF THE CHILD *Holmes*

A study of the mental and physical growth and development of the school child, with special emphasis on physical development and the physical basis of education, the general laws of growth, physical defects, the health of the school child, and preventive mental hygiene.

Fall semester 1 unit

Spring semester 1 unit

16. PSYCHOLOGY OF ADOLESCENCE *Valentine*

The psychology of youth with special reference to the Junior High School.

Fall semester 1 unit

Spring semester 1 unit

ROMANIC LANGUAGES

1. FRENCH *Dony*

A course for beginners.

Fall semester 2 units

3. FRENCH

A course for students who have completed four units of French.

Fall semester 2 units

7. SPANISH *Ellies*

A course for beginners.

Fall semester 2 units

8. SPANISH

A course for students who have completed two units of Spanish.

Fall semester 2 units

SOCIAL SCIENCE

12. IMMIGRANT PEOPLES *Monroe*

The European background of the immigrant; his social, economic, and political customs and traditions; an interpreta-

tion with the view of comprehending the problem of his adaptation.

Fall semester 2 units

15. CURRENT EVENTS

Rypins

A study of human achievement, accomplished and potential, through an interpretation of contemporary social phenomena. Significant events will be traced, so far as possible, to their origins, and their nature analyzed for their economic, political, cultural, and other implications. The presentation will be dominantly sociological, each event studied, serving as an illustration of group action and group control in the complex of social forces characteristic of twentieth century civilization.

Fall semester 1 unit

Spring semester 1 unit

Either semester may be taken independently for one unit only.

32. SLAVIC EUROPE

Kaun

This course will deal with Slavic history and culture. It is a two unit course covering twenty-four lectures which divide themselves into a unit of twelve lectures for the fall semester and one of twelve for the spring semester. While either of these units may be taken independently, students are urged to enroll in this course for the whole year.

This course will be of intense interest since it deals with pressing problems of world significance. The Slavs offer a history and culture of vital importance. Many of these lectures will deal with the culture of the Slavic peoples and will be illustrated with up-to-the-minute slides and materials. The twelve lectures for the fall semester unit are as follows:

1. Who are the Slavs?
2. The Russian State, 862-1917.
3. Main Currents of Thought in Russia.
4. Russian Literature.
5. A History of Poland to 1914 (including Literature).
6. A History of Czechoslovakia to 1914 (including Literature).
7. A History of the Balkan Slavs to 1914 (including Literature).

8. A History of the Balkan Slavs to 1914 (including Literature).
9. Russian Art: Old Architecture and Painting (Illustrated).
10. Russian Art: Realistic Painting and Sculpture (Illustrated).
11. Russian Schools of Art from about 1000 to 1926 (Illustrated).
12. Readings from Russian Prose and Poetry.

Fall semester	1 unit
Spring semester	1 unit

THE LIBRARY OF THE
APR 29 1927
UNIVERSITY OF MICHIGAN

TIME SCHEDULE

4.00—5.30

MONDAY—

Biol. Sci. 12	Public Health.
Educ. 15	Visual Instruction.
Spanish 1	Beginners' Course.
Phys. Sci. 13	A Teachers' Course in Science.
Soc. Sci. 12	Immigrant Peoples.

TUESDAY—

Art 5	Art Appreciation.
Biol. Sci. 7	Nature Study.
Educ. 8	Educational Tests and Measurements.
Educ. 34	Silent Reading for Middle and Upper Grades.
French 1	Beginners' Course.

WEDNESDAY—

Educ. 2	Education for Citizenship
or	or
Educ. 19	Teaching of Social Studies in Junior High School.
Eng. 8	Creative Composition.
Phys. Sci. 7	Story of the Stars.
Psych. 7	Growth and Development of the Child.
Spanish 1	Beginners' Course.

THURSDAY—

Educ. 38	The Work of the Elementary School Principal.
French 1	Beginners' Course.
Psych. 16	Psychology of Adolescence.

FRIDAY—

Soc. Sci. 12	Immigrant Peoples.
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7.30—9.00

MONDAY—

Educ. 1	Principles of Elementary Education.
Educ. 37	Supervision of Elementary Instruction.
Spanish 2	

TUESDAY—

Educ. 22	School Administration and Supervision.
French 2	
Soc. Sci. 32	Slavic Europe.

WEDNESDAY—

Soc. Sci. 15	Current Events.
Spanish 2	

THURSDAY—

Eng. 28	Self-Cultivation with Books.
French 2	

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THE EDUCATIONAL QUARTERLY BULLETIN OF THE STATE TEACHERS COLLEGE OF SAN DIEGO

Volume Fourteen

JUNE, 1926

No. 2

Announcement of COURSES OF INSTRUCTION

OFFERED IN

Education, Teacher Training, Arts
Literature, Science, Commerce
Social Service

NOV 30 1936 1926-1927



*Published Quarterly by the State Teachers College of San Diego,
SAN DIEGO, CALIFORNIA*

Entered as second-class matter, April 15, 1913, at the post office, San Diego,
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STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

STATE DEPARTMENT OF EDUCATION

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AM. H. COHN	- - - - -	Deputy Director of Education

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L. SEELIG	- - - - -	Engineer

*Until January 1, 1926.

†Since January 1, 1926.

FACULTY

EDWARD L. HARDY, President. School Administration. B.L., University of Wisconsin; M.A., University of Chicago; Study of European secondary schools, 1898-1899; Principal San Diego High School, 1906-1910. (Appointed September 1, 1910.)

ARTHUR G. PETERSON, Dean of the College. Economics and Sociology. A.B., College of the Pacific; M.A., Stanford University; Vice Principal San Diego High School and Director of Junior College, 1919, 1920, 1921. (Appointed September 1, 1921.)

RS. ADA HUGHES COLDWELL, Dean of Women, Head Home Economics Department. Student Hopkins Art School, San Francisco; Special Study in Europe; Grade Teacher, Alameda, California, six years; Student California Medical College, San Francisco; Licensed Pharmacist, State of California; Special Study, Columbia University; Head of Home Economics Department, University of Montana, Summer Session, 1915. (Appointed Head of Home Economics Department September, 1907; Appointed Dean of Women June, 1915.)

VING E. OUTCALT, Head Department of English and Vice Chairman Executive Committee. Student, University of Illinois, 1888-1891; A.B., Stanford University, 1896; M.A., Stanford University, 1897; graduate student, Stanford University, 1897-1898; Head Department of English, San Diego High School, 1907-1912; travel in Europe, 1910-1911; research work, Stanford University, 1921-1922. (Appointed September 1, 1912.)

LLIS E. JOHNSON, Director of Education. Graduate of State Normal School, St. Cloud, Minnesota; Ph.B., A.M., Illinois Wesleyan University; A.B., A.M., Ph.D., University of Minnesota; Sc.D., South Dakota State College; LL.D., Dakota Wesleyan University. Taught in rural, village and city schools, state normal school and university. President of State normal schools at Ellendale, North Dakota, and Aberdeen, South Dakota, and of South Dakota State College, Brookings. Member of staffs of the educational surveys of Virginia and Alabama. (Appointed April 1, 1924.)

RS. GERTRUDE SUMPTION BELL, Director of Tests and Measurements. A.B., Indiana University; M.A., Stanford University; graduate Indiana State Normal School; research work, Clark University; Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University. (Appointed August 1, 1916.)

ORGIA A. AMSDEN, Commerce. Gregg School, Chicago; special secretarial training in various institutions; University of California summer sessions and extension division work; teacher in University of California summer school, 1918; traveling representative and secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant editor and reporter, Ypsilanti, Michigan, Daily Press. (Appointed September 1, 1925.)

W. AULT, Principal of the Training School. Undergraduate work at Miami University and Valparaiso University, B.S. Graduate work at the University of Iowa and the University of South Dakota, M.A. Superintendent of city schools twelve years; conductor and instructor in teachers institutes; Professor of Education at Southern State Teachers College, Springfield, South Dakota, 1922-1924. (Appointed September 1, 1925.)

UTH G. BAGLEY, English. A.B., University of Michigan; A.M., University of California; graduate study, University of Illinois and Columbia University; Head Department of English, State Normal School, Oshkosh, Wisconsin; Instructor, San Diego Junior College, 1919-1921. (Appointed September 1, 1921.)

*On leave of absence, second semester, 1925-26.

O. W. BAIRD, Physics. A.B., University of Wisconsin; M.A., University of California; Instructor in Physics, University of Washington, one year; Head Department of Science, Tacoma High School, six years. (Appointed September 1, 1921.)

MARY BENTON, Head Department of Fine Arts. Student at Rosemont Dezalet Lausanne, Switzerland; at Chicago Art Institute; at New York School of Art; at Teachers College, Columbia University; pupil of W. J. Whittmore, miniature painter, and of Sara Butterworth, craftsman. (Appointed June 1, 1916.)

LESLIE P. BROWN, Romanic Languages. A.B., Yale University; M.A., Harvard University. Instructor in French and Spanish, Northwestern University 1913-15; Instructor in Harvard University, 1916-17; Instructor in University of North Carolina, 1917-18; Instructor in University of Chicago, 1918-22 (Appointed July 1, 1922.)

MARY CALLAWAY, English. A.B., Mississippi State College for Women; M.A. Stanford University; M.S. (Journalism), Columbia University. Teacher in Mississippi State College for Women; teacher in The Brearly School, New York City. (Appointed February 1, 1926.)

VINNIE B. CLARK, Geography. A.B., University of Wisconsin. Graduate student University of Chicago; Assistant in Geography, University of Wisconsin; Oak Park, Ill., High School, 1913-1914; travel in Mexico and graduate study, University of Mexico, 1922; Summer Session Instructor, University of California Southern Branch, 1923; Travel in Europe, 1924. (Appointed September 1, 1914.)

KATHERINE E. CORBETT, Training Supervisor. B.Pd., Michigan State College; B.S. and A.M., Teachers College, Columbia University; graduate Public School Music course, Ypsilanti Conservatory of Music; Teacher in Public School Ypsilanti; special teacher in Americanization courses; Training Supervisor Kent State Normal College, Ohio. (Appointed July 1, 1921.)

GEORGIA V. COY, Botany. Graduate San Diego Normal School; Teacher in San Diego County Schools, 1909-1910; B.S., Columbia University; M.S., Ph.D. University of Chicago; Bachelor's Teaching Diploma in Biology, Teachers College, Columbia University; graduate work at University of California, 1911 (Appointed September 1, 1912.)

LESLIE S. EVERTS, Accounting. B.L., University of Wisconsin; C.P.A., California; Wisconsin; Public Accountant in Milwaukee, Wisconsin, and San Diego, California, 1909. (Appointed September 1, 1921.)

WALLACE A. GILKEY, Instructor in Physical Science. A.B. and C.E. (Chemical Engineer) at Stanford University. Instructor at Seale Military Academy, spring of 1922. Employed three years in chemical engineering with the San Cruz Portland Cement Company in the Cottrell Precipitation Plant; the American Smelting and Refining Company as laboratory chemist; and the Refining of Standard Oil Company at El Segundo, California, as chemical engineer. (Appointed September 1, 1925.)

EDITH C. HAMMACK, Training Supervisor. Graduate State Normal School San Diego; B.A., State Teachers College of San Jose; professional study University of California; Public School Teacher, five years. (Appointed February 1, 1911.)

MRS. ALICE LILI HEIMERS, French and German. Student at Universities of Bonn, Lausanne, Berlin (Ph.D. Berlin). Postgraduate work at University of Chicago and Columbia University. Head of Department of Modern Languages, State Normal School, Indiana, Pa.; Assistant Professor of Modern Language, St. Lawrence University, N. Y.; Supervisor of Foreign Language Press in the United States during the World War. Assistant Editor of "Foreign Bodies" (Appointed September 1, 1924.)

EDGAR L. HEWETT, Anthropology. D.Sc., University of Geneva, Switzerland. Director, School of American Research of the Archeological Institute, America; Director, San Diego Museum. (Appointed September 1, 1922.)

LICE B. HUNTER, Fine Arts. Student at Teachers College, Columbia University; Art Institute, Chicago; New School of Design, Boston; South Kensington Museum School, London. Pupil of Hamilton Easter Field, Arthur Friedlander, and Robert Laurent. Travel and study in Europe and the Orient. (Appointed September 1, 1924.)

LYRTLE ELIZABETH JOHNSON, Biology. B.S., M.S., Ph.D., University of California; Research Assistant, Scripps Institute, La Jolla, California; Instructor, Pasadena High School, 1912-1921. (Appointed September 1, 1921.)

YBIL ELIZA JONES, Drama Production. B.L., M.L., University of California. Director of Pasadena Community Playhouse, Junior Players; Drama Instructor in Chouinard Art School, Los Angeles; Organizing Secretary and Instructor in Play Writing of Summer Art Colony, The School of Theatre Arts at Pasadena Community Playhouse; Drama Organizer and Director of Community Service, Playground and Recreation Department of San Diego.

LARJORIE E. LANDERS, Acting Head Department of Home Economics. A.B., Stanford University; Special Certificate Home Economics, Santa Barbara State Teachers College; Head Department Home Economics, San Juan Union High School; Assistant Dietitian, Fabiola Hospital, Oakland, California, 1918; McKinley High School, Honolulu, T. H.; Teacher Domestic Art, Kern County Union High School, Bakersfield, California. (Appointed September 1, 1924.)

H. LANE, Public Speaking and Dramatics. A.B., A.M., Northwestern University, graduated by Northwestern School of Oratory; 1896-1898, Instructor of English and Public Speaking at Oberlin College; 1900-1903, Professor of English and Public Speaking, Northwestern College; 1903-1907, Professor of English and Public Speaking, Tabor College; 1907-1912, Professor of Public Speaking, Washburn College; 1912-1923, Professor of Public Speaking, University of Pittsburgh. (Appointed September 1, 1923.)

HARLES B. LEONARD,* History. A.B., M.A., Ph. D., University of California; graduate study, one year, at University of California; Instructor in History, Lowell High School, San Francisco. (Appointed September 1, 1921.)

LEWIS B. LESLEY,* History. A.B., Stanford University; M.A., University of California; Instructor, Principia School, St. Louis, Mo., 1920-1921; Teaching Fellow in History, University of California, 1922-1923; Native Sons' Traveling Fellow in Europe, from University of California, 1923-1924; Assistant, Department of History, University of California, Summer Session, 1924. (Appointed September 1, 1924.)

GEORGE R. LIVINGSTON, Mathematics. B.S., M.A., University of California; Instructor, San Diego Junior College, 1914-1918; Instructor, Santa Barbara Junior College, 1919-1921. (Appointed September 1, 1921.)

WILLIAM L. NIDA, Supervisor of Practice and Appointment Secretary. Ph.B., Ohio State University; graduate student, University of Chicago; M.A., University of Southern California; Principal of Ohio High Schools, nine years; Superintendent of Schools, seventeen years, Illinois; Supervisor Junior High Schools, San Diego, California, two years. (Appointed July 1, 1921.)

LARIAN L. PEEK, Supervisor, Training School. A.B. and A.M., Stanford University; Teacher in Public Schools; Assistant in History, Stanford University; Dean of Women, State Normal School, Cheney, Washington; Francis W. Parker School, San Diego, California. (Appointed September 1, 1923.)

HARLES E. PETERSON, Physical Education. Student at Oregon Agricultural College, the University of California and the State Normal School of San Diego; student two years under Robert Krohn; Director of Playgrounds, Y. M. C. A. Physical Education, Physical Education and Recreation in United States Army camps; Berkeley School System. (Appointed July 1, 1921.)

EO FRANCIS PIERCE, Head of Department of Chemistry. B.S., Grinnell College; M. Sc., Tulane University; Ph.D., Stanford University; Research Assistant and Instructor, University of Idaho; Professor of Chemistry, Washburn

*On leave of absence, 1925-1926.

College; Instructor, Tulane University; University Fellowship, Stanford University. (Appointed September 1, 1923.)

KENNETH POTTER, History and Political Science. A.B., University of Michigan; 1922-1923, Instructor in History and Science in Durand High School, Michigan; M.A., University of California; 1923-1924, Assistant in History in the University of California; Assistant in Political Science in the University of California, Summer Session 1924; Instructor in American History in the Berkeley High School, Berkeley; Graduate student in the University of California 1924-25 and the Summer Session 1925. (Appointed 1925.)

ALICE M. RAW, Physical Education. A.B., University of Southern California; Assistant in Physical Education, Polytechnic High School, Los Angeles; Assistant in Physical Education, University of Southern California. (Appointed September 1, 1923.)

MABEL M. RICHARDS, Arithmetic and Training Supervisor. A.B. and A.M. University of Missouri; graduate student, University of Southern California; Rural School, City School and High School Teacher; City Superintendent of Schools, six years; Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College, two years. (Appointed September 1, 1921.)

CHARLES R. SCUDDER, Industrial Arts. Preparation at University of Illinois; Teacher of Industrial Work at Grand Rapids, Michigan; Director of Industrial Arts, Evanston, Illinois; Director of Industrial Arts at Washington State Normal School at Bellingham. (Appointed September 1, 1918.)

W. T. SKILLING, Agriculture and Nature Study. State Normal School, Los Angeles; teacher in Los Angeles county and city public schools five years; student at Stanford University one year; B.S., M.S., University of California; Assistant in Physics, University of California, 1899-1901. (Appointed September, 1901.)

FLORENCE L. SMITH, English. A.B., Northwestern University; M.A., University of Chicago; Instructor, State Normal School at Oshkosh, Wisconsin. (Appointed July 1, 1917.)

LEILA D. SMITH, Music. Mus. B., A.B., Oberlin College; formerly Head of Department of Music, State Teachers College, Winona, Minnesota. (Appointed September 1, 1922.)

WILL J. STANTON, Commercial Law. LL.B., University of Michigan; graduate study, University of Michigan; editor legal journal, fourteen years; Prosecuting Attorney, Michigan and California; Instructor, San Diego High School and Junior College. (Appointed September 1, 1921.)

S. LAVENDER STOVALL, Head of Department of Engineering. Student University of Texas, 1895-6, 1897-8; B.S. in Electrical Engineering, University of California, 1924. Five years with the General Electric Company, research and design of apparatus; five years Chief Engineer of Mt. Whitney Power and Electric Company; three years on Irrigation Engineering; four years Efficiency Engineer in the oil fields of California.

JESSE RAND TANNER, Head of Department of Physical Education. Graduate Boston Normal School of Gymnastics; B.S., Columbia University; Bachelor Teaching Diploma, Teachers College, Columbia University; tutor, Brookline Massachusetts; Graduate Student, University of California, 1925. (Appointed July, 1904.)

WILLIAM H. WRIGHT, Commerce. B.S., University of California; graduate study one year, University of California; Head Department of Commerce, Union High School, Visalia, California, 1919-1921. (Appointed September 1, 1921.)

Assistant Instructors

DOROTHY R. HARVEY, Biology. A.B., San Diego State College; summer school work in Biology at Scripps Biological Institution, La Jolla; at the University of California and at the University of Southern California; public school teaching five years. (Appointed September 1, 1924.)

GENEVIEVE KELLY, Sociology. A.B., University of California; A.M., Columbia University; Los Angeles Public Library School one year; teacher at Corcoran Union High School; Librarian at Northern Arizona Normal School, Flagstaff; Librarian at Scripps Foundation for Research in Population Problems, Oxford, Ohio. (Appointed September 1, 1924.)

Teaching Fellowships

ALMYRA DAWSON, Primary Education. Elementary diploma graduate of San Diego State College; candidate for A.B., June, 1926. (Appointed September 1, 1925.)

JOHN HANCOCK, Physical Education

EDITH MILLS SCOTT, Training School

Student Assistants

FLORENCE ANTHONY, A.B., Psychology

LAURA CHASE, Office of the Dean

GEORGE PARSONS, Chemistry

GLEN VAN DOREN, Physics

CLARENCE WHITE, Chemistry

LULU GERMANN, Library

HISTORICAL SKETCH

The State Teachers and Junior College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the legislature, later approved by the Governor of the state and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego."

In June of 1921, under an enactment of the legislative session of the same year, known as the "junior college" law, the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) are offered, both to students who wish to prepare for the work of the upper division (junior and senior years) of colleges and universities and to students who wish to prepare themselves for the teaching service in the new three- and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the degree A.B. (major in Education) were established for this institution June 30, 1923.

For the certification of teachers, the authorized courses (elementary, special elementary, special secondary and junior high school) are offered, and require, approximately, two and one-half years, three years and four years of work done in residence.

GENERAL INFORMATION

CALENDAR, 1926-1927

Summer Session, 1926

June 26-August 1, Term I

August 9-August 31, Term II

First Semester, 1926-27

September 9, 8:00 A.M., Intelligence Examination; 1.30 P.M., Examination in

Subject A (English Composition)

September 9, Registration of Old Students

September 10, Registration of New Students

September 13, Class work begins

November 12, Term I ends

December 18, Christmas Recess begins

January 2, Christmas Recess ends

February 2, Mid-year graduating exercises

February 3-6, Mid-year Recess

Second Semester, 1926-27

February 3, 8.00 A.M., Intelligence Examination 1.30 P.M., Examination in

Subject A (English Composition)

February 4, Registration of New Students

February 7, Class work begins

April 8, Term I ends

April 9-17, Spring Recess

April 18, Term II begins

May 1, Dedication Day (celebrated April 30)

May 20, 8.00 A.M., Intelligence Examination; 1.30 P.M., Examination in

Subject A

June 17, Annual Commencement

Summer Session, 1927

June 27-August 5, Term I

August 8-August 30, Term II

THE CALENDAR AND REGISTRATION

The college year is divided into the autumn and spring semesters of eighteen weeks each, followed by a summer quarter consisting of a first term of six weeks (the regular Summer Session) and a second term of four weeks in which professional courses of a seminar type are offered to students and teachers whose certification needs may be met by supplemental units of credit (not to exceed 4) earned in the

term. Students may enter at the beginning of either semester and at the beginning of Term I of the summer quarter.

The Summer Session meets the needs of regular students who wish to gain credits toward the professional diploma or the A.B. degree, of teachers in service who wish further professional training and of Junior College students who wish to secure supplemental credit or to shorten the time for completion of work for the Junior College Certificate.

Registration of students will be made from September 7 to September 12. A duly certified transcript of the applicant's record must be in the possession of the Registrar on or before the day of the applicant's registration.

N.B.—For details, see "Requirements for Admission."

DEPARTMENTS OF INSTRUCTION

TEACHER-TRAINING

The College offers courses for the training of teachers in both the primary and upper divisions of the elementary school and the Junior High School with special recommendation in English, Science, Mathematics, History, Fine Arts, Industrial Arts, Home Making, Music, and Physical Education. The degree B.A. (Major in Education) is granted to students completing the four-year courses in elementary and junior high school education.

Certificate courses for candidates for the elementary certificate and for the elementary special certificates of the several types will continue to be regularly offered for those who wish to teach before completing a degree course. The special certification courses offered include preparation for the certificate of elementary and junior high school grade of the Arts Type (general class), Music Type (public school music), Prevocational Type (home making, occupations and home mechanics), Physical Education Type (physical training activities), and for the special certificate of secondary grade in physical training activities.

Students who wish to enter for special certificate courses should not fail to note the matriculation requirements outlined on pages 24-27.

LIBERAL ARTS

In the Liberal Arts division courses are offered in the following fields: Anthropology, Economics, Engineering, English, Foreign Language, Geography, Graphic Art, History and Political Science, Home Economics, Hygiene, Mathematics, Music, Psychology, Botany, Physics, Chemistry and Zoology.

Descriptions of the courses in both the professional and the collegiate field, with complete information as to admission requirements, will be found on the pages following under the headings "Admission," "Curricula," etc.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students will be required to meet the health standards set by the department of physical education, and all lower division students, unless excused for cause, will be required to take the courses in physical education prescribed for freshmen, and sophomores. Furthermore, each student will be expected, as a matter of efficient student and community life, to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. All freshmen with poor study habits are required to take the course in the technique of study, which includes tests of reading ability, of general intelligence, of attainment in English, together with student self-rating and other training in methods of efficient study and work. Frequent ratings of the student are made by his instructors, so that he may at all times know how he stands; but the ability of the student to manage his own educational career and to come reasonably near to his best capabilities are factors that will count in his final ratings.

Standards of character, as developed by and measured by honest student work, and as revealed by evidences of the possession of thoroughgoing self-respect and community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, and every student will have full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.

For the assistance of students and student organizations, adviserships have been established as follows:

THE STUDENT ADVISERS

Concerning matters of student-body policy, leaves of absence (men), personal advice (men), use of buildings, etc.—The Dean of the College.

Concerning appointments to teaching positions—The Appointment Secretary.

Concerning the housing and living arrangements of students, rules of conduct, student social affairs, personal advice (women), rules of attendance, etc.—The Dean of Women.

Concerning supervision of practice teaching, conferences, etc.—The Director of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar; The Dean.

Concerning health and physical condition, school athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The supervisors of training.

Concerning student-body affairs—The executive officers of the student body; The Dean of the College; The Dean of Women.

STUDENT LIFE AND ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, The Associated Students. The following list indicates the major activities:

Delta Kappa (Chemistry), Engineering Club, Geography Club, Spanish Club, Two Masque Players, Treble Clef Club, Men's Glee Club, College Orchestra.

Men: Men's Club, Espilon Eta, Eta Omega Delta, Phi Lambda Xi, College "Y" Club, The Aztec Club.

Women: Associated Women Students, Women's Athletic Association, College Y. W. C. A., J. U. G. Club, Shen Yo, Sphinx, Fra Di Noi, Komo Klub, Gamma Phi Zeta, Phi Kappa Gamma, Phi Sigma Nu, Sigma Pi Theta, Tau Zeta Rho, S. A. B. E. Club.

Men's Athletics: Football, baseball, basket ball, track, swimming and tennis.

Women's Athletics: Tennis, basket ball, fencing, rowing and swimming.

Publications: The Aztec (weekly), and The Del Sudoeste (year book).

APPOINTMENT SERVICE

The department of recommendations has charge of the placement of graduates, assisting them in securing teaching positions and assisting superintendents and boards of school trustees in finding qualified teachers.

Recommendations are based on records which indicate every item in the candidate's equipment and particular care is taken to select for nomination in each case a teacher who can meet the requirements of the position.

FEES AND EXPENSES

Tuition is free to all students.

Registration fee, each semester (not returnable)-----	\$1 50
Student body fee, each semester (not returnable)-----	4 50
Men's and women's organizations, each (not returnable)-----	50
Class fee -----	50

COURSE CHARGES

(Payable each semester)

Bacteriology -----	\$3 00
Biology -----	1 50
Botany -----	2 00
Chemistry 1A-1B, 6AA, 6A-6B, 8-9-----	7 50
Chemistry 101-102-----	2 50
Chemistry 123-124 (per hour)-----	2 50
Chemistry Deposit (each course)-----	2 50
Fine Arts (Advanced Design, Costume Design, Stage Craft)-----	1 00
Household Art (Clothing, Millinery)-----	1 00
Household Science (Dietetics, Food Economics)-----	4 00
Industrial Arts-----	1 00
Pattern Making-----	2 50

Physics (each course, except 2A-2B)-----	\$1 00
Physics Deposit (each course, except 2A-2B)-----	3 00
Physiology -----	1 00
Surveying -----	1 00
Woodwork -----	1 50
Zoology -----	2 00

EXPENSES: WOMEN STUDENTS

The Dean of Women will furnish, upon request, addresses of homes in which board and room may be secured, also a list of apartment houses which may be patronized by women students. Occasionally students are placed in homes where they may work for board and room, but it is not advisable to depend entirely upon such an opportunity because of the irregularity of the demand.

Board and room may be procured for from \$40 to \$45 a month. Apartments, consisting of one room, kitchenette and bath, rated at \$18 to \$35 a month, will accommodate one or two persons. A cafeteria is maintained by the college where noon-day meals are served at cost.

The minimum expense for one semester of eighteen weeks is estimated at \$210; board and room, \$180; books, paper and other necessary materials, \$15; registration and student-body fees, \$6.50; laboratory fees, \$1 to \$10. Clothing, laundry, car-fare, recreation and personal incidentals are factors for the student to decide, but it is suggested that clothing be of the simplest type, such as gingham dresses, one-piece coolen dresses, one warm outside coat, and a very informal afternoon or evening dress with suitable accessories.

SELF HELP AND LOAN FUND

Opportunities for part-time employment for students not residents of San Diego are frequent, particularly in the case of the young women who are able to assist as other's helpers in housework or in the care of children. A limited amount of clerical work in offices and library, and of employment in the school cafeteria, may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. The loan fund is administered for students in the professional courses, seniors in teacher training being eligible for assistance. Application should be made to the Dean of Women. Men should consult the Dean concerning part-time employment.

BUILDINGS AND EQUIPMENT

The college building houses the library, the auditorium, the gymnasium, offices, laboratories and classrooms. The training school is housed in three separate units, and new buildings for this department are planned for the biennial period 1925-1927.

The building for Applied Arts was made ready for occupancy in September, 1922, as a result of the remodeling of the old Training School Building. A new building for physical education of men was finished January 1, 1923, and new quarters for the physical education of women at the same date.

The institution has facilities and equipment as follows:

A College Library of 32,000 volumes.

Laboratories for Physics, Chemistry, and Biological Science.

Shops, studios and laboratories for the courses in Fine and Industrial Arts and Home Economics.

For Physical Education, a well equipped gymnasium, lockers and showers, classrooms, and athletic field, tennis courts, etc.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and above, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters,

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than the physical ones must be taken into account by the student choosing a college. The institutions and facilities that go to make up the "greater college" or the "greater university" must be present in a college or university city, if the student is to work in a genuinely cultural atmosphere. In cultural standards in art, music, literature, and science, San Diego is an eligible college city because while it is not a large city yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-1916, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archæology. There is complete cooperation with the directing boards controlling the collections, and the Director of the San Diego Museum is a member of the faculty of the College. The Art Gallery of the California Building often contains excellent exhibitions of pictures, and there are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings and pageants.

At La Jolla, within the city limits, the Scripps Biological Institute, operated by the University of California, gives opportunity for important co-operation in the biological field.

The pre-engineering courses in the Liberal Arts division will benefit greatly because the selection of San Diego by the United States Navy as the site of important navy activities, such as the Marine Base, the Naval Training Station, Naval Aviation and the Destroyer Force Base, has made available a great deal of machinery, material and equipment useful for study and observation, especially in the field of electrical engineering.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point, particularly as the College will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The professional, teacher-training courses profit because of the policy of cooperation generously followed by the City School Department, which has resulted in the merger of the City Junior College with the Teachers College, and in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary schools, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the College.

Much of what is best in modern thought and influences is brought to the student body through its weekly assembly, the programs for which, as arranged by a committee of students and faculty, include almost every worth while type of topic and appeal.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration class attendance, conduct of examinations, etc., college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system"; but there is a standard of honor as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom or of student-body by-laws) and, usually, are settled by student action.

One problem, in process of solution, is that of student relations to the course of study. At present, the studies are prescribed in arrangements of curricula and "courses," with certain elections by the individual student, and these prescriptions are, of course, necessary. However, an effort is being made to give the student body a certain voice in and responsibility for study arrangements, through a joint committee of students and faculty members.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills and

mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round, and the College Outdoor Theater makes possible the presentation of many student productions in drama and pageant.

REQUIREMENTS FOR ADMISSION

I. FRESHMAN STANDING

a) A graduate of a California high school may enter either the Teachers College or the Liberal Arts division of the San Diego State College without examination, provided the following requirements are satisfied:

1. The candidate must be duly certified as a graduate of an accredited California high school.
2. The graduate must have completed a four-year high school course aggregating at least 15 standard units of preparatory work, including the following requirements for graduation prescribed by the California State Board of Education: English, 3 units; United States History and Civics, 1 unit; Laboratory Science, 1 unit; and two majors of at least 3 units each—a major consisting of three years of study in one of the following groups: (a) English (in vocational courses 1 unit of Citizenship may be included with 2 units of English to make one major); (b) Mathematics, including Mechanical Drawing; (c) History and Social Science; (d) Physical and Biological Sciences; (e) Foreign Language—3 or more units in one language, or 2 units in each of two languages.
3. The candidate must be specially recommended for admission to the San Diego State College on the basis of a scholarship record that satisfies the prescribed requirements for admission to the University of California.

N. B.—The admission form prescribed by the University of California must be used, and will be furnished upon request.

b) A candidate from a secondary school outside California that is accredited by the New England College Entrance Certificate Board, by the North Central Association of Colleges and Secondary Schools, or by other colleges and universities of recognized standing will be admitted to freshman standing provided he has satisfied the requirements in (2) above, and has maintained an average scholarship standing well above the mark required by the school for graduation.

c) A graduate of a California secondary school not accredited who is strongly recommended by the principal of his school will be admitted to freshman standing provided he satisfactorily passes examination in at least 8 units of work selected from subjects prescribed for graduation by the California State Board of Education. Other candidates who are unable to present satisfactory school certificates may be admitted by successfully passing examinations in at least 12 standard high school units.

Certificates of successful examinations before the College Entrance Examination Board will be accepted in lieu of matriculation examinations conducted by the San Diego State College. The entrance examinations of the Board are held in June each year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon a blank form to be obtained from the Secretary of the Board upon request.

For purposes of guidance, all students entering the college are required to take an intelligence test. Exceptions may be made in case of special students who register for less than six units of work.

MATRICULATION REQUIREMENTS FOR THE VARIOUS CURRICULA

A candidate for admission to the curricula for the elementary school certificate must have completed a standard high school course of 15 units, including the following:

Three units in each of two of any of the following five groups of subjects: English, Mathematics, Foreign Language, Physical and Biological Science, Social Science, with a required minimum, further, of 3 units in English, 1 in United States History and Civics and 1 unit in a Laboratory Science.

The following preparatory subjects are required for admission to the curricula for the A.B. degree (Major in Education) and to the Liberal Arts curricula leading to certificates in the curricula in Letters and Science, Commerce, Journalism and in the Premedical, Predental and Prelegal curricula:

English	3	units
A Foreign Language ¹	2	units
A Laboratory Science ²	1	unit
Algebra	1	unit
Geometry	1	unit
United States History and Civics	1	unit
Electives ³	6	units

The following preparatory subjects are required for admission to the Liberal Arts curricula leading to certificates in Engineering (Mechanical, Electrical, Civil or Chemical), and in Agriculture and Architecture.

English	3	units
Elementary Algebra	1	unit
Algebraic Theory	$\frac{1}{2}$	unit
Plane Geometry	1	unit
Trigonometry	$\frac{1}{2}$	unit
Physics ⁴	1	unit
Chemistry	1	unit
United States History and Civics	1	unit
Mechanical Drawing ⁴	1	unit
Electives ⁵	5	units

II. ADVANCED STANDING

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing. All teachers with experience must present verified statements of successful experience for the time (up to five years) for which they wish credit.

N.B.—Transcripts of record from other institutions will not be returned or copies of them made.

¹Two units of French or German are required for admission to the Premedical curriculum and to the curricula for the A.B. degree (major in education).

²Chemistry is required for admission to the curriculum in Letters and Science when the candidate intends to specialize in Home Economics, Physical Education and Hygiene. Chemistry and Physics (2 units) are required for admission to the curricula for the A.B. degree (major in education) when the candidate intends to specialize in General Science and Biology in the Junior High School, to the Premedical curriculum, and to the curriculum in Letters and Science when the candidate intends to specialize in public health, nursing or in a natural science except Botany. Physics is recommended, but not required for students who intend to specialize in Zoology.

³Algebraic Theory ($\frac{1}{2}$ unit) and Trigonometry ($\frac{1}{2}$ unit) are required for admission to the Commerce curriculum and the curriculum in Letters and Science when the candidate intends to specialize in Mathematics.

⁴Physics and Mechanical Drawing are recommended but not required for admission to the curriculum in Agriculture.

⁵French or German (2 units) is required for admission to the curriculum in Industrial or Engineering Chemistry.

(NOTE.—Deficiencies in certain subjects may be removed after the candidate has been admitted to freshman standing. The removing of such deficiencies, however, may make it necessary for the student to extend his college course beyond the normal period of time required for its completion.)

III. SPECIAL STUDENTS

A candidate not less than 21 years of age who has not had the opportunity to complete a satisfactory high school course but who is considered competent to undertake certain courses may be admitted to special standing in the Liberal Arts curricula. Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Applicants for admission to special status will be required to take a psychological test before admission. Such students may become candidates for graduation upon satisfying the regular entrance requirements.

A candidate not less than 24 years of age (21 years of age if honorably dismissed from war service, army, navy or auxiliary) may be admitted to special standing in the teacher training curricula and given such credit as may be determined by the Committee on Advanced Standing.

GENERAL REGULATIONS

REGISTRATION

All students are required to register on one of the regular registration days preceding the opening of the class work of each semester. Any continuing student who registers after the close of the first week of the semester is subject to limitation of his study list and to a late registration fee of one dollar a day. Changes in study lists may be made only with the approval of the proper study-lists officer. A fee of one dollar is charged for a change in the study list after the close of the regular registration period.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements and has demonstrated his ability to do satisfactory college work. The standing of students is therefore provisional during the first semester of residence.

A student who enters with credit for a subject in which he did not receive a recommended grade may, under certain conditions, be permitted to remove his matriculation deficiency either (1) by passing an examination in the subject with a grade of B or (2) by continuing the same line of study in college in at least six units of work with a grade of B.

CLASSIFICATION

Regular students are those students who have complied with the requirements of matriculation and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 28 to 63 units of work are classified as sophomores; those who have completed 64 to 91 units are juniors; and those who have completed 92 or more units are seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work. Sixteen hours, or units, per week of recitation or lectures, or an equivalent in laboratory work, constitute an average semester's program. During the first semester of work at the College no student will be permitted to register for more than 16 units of work in addition to physical education. After his first semester of work, a student is ordinarily not permitted to register for less than 12 nor more than 18 unit-hours of new work, in addition to physical education, unless permission is given in advance by the proper study-lists officer. Ordinarily not more than 16½ units, in addition to physical education, will be carried toward graduation for the first of any semester, except under the following conditions: a program of 17 units, in addition to physical education, will be credited provided the student was

registered for at least 12 unit-hours in the preceding semester and attained an average not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points.

SPECIAL SUBJECT REQUIREMENTS

ENGLISH COMPOSITION

All entrants to the College are required to take a special examination elementary English composition. No student who has failed to pass this examination or to meet an equivalent requirement will be given a certificate in any curriculum. All students who do not pass in the examination in Subject A are required to take a course in remedial English for which a fee of \$10 is charged. This course is given three hours a week each semester.

PHYSICAL EDUCATION AND HYGIENE

All regular students upon admission to the College must report to the proper health examiner for enrollment in physical education classes. A student may be excused from exercises in physical education on account of illness or physical disability only by petition to the health examiner.

Credit for work in hygiene is required in the freshman or the sophomore year.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed.

Grade points are assigned as follows: Grade A, 3 points per unit; B, two points per unit; C, one point per unit; D, no points; E, minus one point per unit; F, minus one point per unit. Removal of grade E or F will entitle the student to a cancellation of the "negative grade points" and a grade of D for the course.

To qualify for a certificate in any curriculum or for a transcript of scholarship record in transferring to another collegiate institution, a student must have earned as many grade points as he has earned units of credit; that is, he must have attained an average of at least "C" grade in all work undertaken at the College.

CONDITIONS AND FAILURES

Credit is not given for courses in which the student has been given a grade of E (conditioned) except upon the removal of the deficiency by supplemental examinations or study. A report of "incomplete" is made only in case the student, for good reasons, has been absent from class meetings or examinations or has failed to perform a definite part of the work of the course. A condition of "incomplete" not removed before the end of the following semester is considered a failure. In case of failure in a course no credit is given until the course has been repeated.

DISQUALIFICATION

A regular student who fails either (1) to pass in at least 8 units of designated registered work, or (2) to obtain at least 12 grade points in any semester is disqualified for further attendance at the College unless, after due consideration of the merits of the case, the Committee on Scholarship decides that the student shall be placed on probation.

The above rule applies with full force to special students who are registered for 12 or more units of work, but is modified in its application to limited students by considerations of outside work and condition of health.

A disqualified student may be reinstated, after an interval of one semester, on reasons satisfactory to the Committee on Scholarship.

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any quarter is ineligible in the next succeeding quarter to represent the College in connection with any athletic, literary, musical, dramatic, social, or other organization.

SPECIAL EXAMINATIONS AND REEXAMINATIONS

Entrance examinations and examinations taken for the purpose of removing articulation deficiencies or making up a course left "incomplete" are regarded as special examinations. Reexaminations are permitted only for the purpose of removing deficiencies incurred in College courses and can not be taken for the purpose of improving the grade mark recorded on the student's permanent record.

A fee of two dollars, payable in advance, is charged for every special examination and reexamination.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. A withdrawal in the second quarter of a semester except for reasons beyond the student's control is interpreted as a failure in the course.

LEAVE OF ABSENCE

A student should apply to his instructor for a leave of absence or an excuse for having been absent from a class exercise. A leave of absence for one or more days should be obtained from the proper dean. An excuse for absence does not relieve the student from completing all the work of each course to the satisfaction of the instructor.

HONORS

Honorable mention is granted with a certificate to a student who has attained twice as many grade points as units of credit.

FELLOWSHIPS

Fellowships (without honorarium) have been instituted, a fellowship to be conferred by vote of the faculty on nomination of the department concerned, and entitle the recipient to special training and to recommendation to county boards of education for the special elementary or the special junior high school certificate.

Candidates must be graduates of California, or equivalent, Teachers Colleges, and must submit satisfactory evidence of special fitness and attainment, or must be able to show two years of college or other equivalent training and special fitness.

Holders of fellowships who have done one year of satisfactory work will be entitled to recommendation for the special elementary and junior high school certificate; provided, that within the period specified, they are able to meet the requirements of the State Board of Education for special certification.

THE DEGREE COURSES

In accordance with legislation enacted in 1921, the State Board of Education has prescribed the following general requirements for the degree of Bachelor of Arts:

LOWER DIVISION (Freshman and Sophomore Years)

I. Required	42 units
1. Psychology	6 units
2. Social Sciences	12 units
a) Contemporary Civilization	
b) Economics	
c) Political Science	
d) Sociology	
e) Geography	
3. Biological and Physical Sciences	12 units
4. English (including oral English)	6 units
5. Physical Education	6 units
	42 units

II. Required Group Electives ¹ -----	22 units
1. English	
2. History	
3. Political Science	
4. Sociology	
5. Education ²	
6. Biological Sciences	
7. Philosophy or Psychology	
8. Mathematics	
9. Physics	
10. Chemistry	
11. Geography	
12. Greek or Latin	
13. Romanic Languages	
14. Art	
15. Music	
16. Agriculture	
17. Commerce	
18. Physical Education	
19. Industrial and Mechanical Arts	
20. Home Economics	

UPPER DIVISION (Junior and Senior Years)

III. For all degree courses leading to high school certification of teachers of special subjects, the minimum number of units of professional work shall be the same as the minimum number prescribed by the State Board of Education for the certification of general high school teachers; the minimum number of professional units for all degree courses leading to elementary certification shall be 32; and for all types the maximum number of professional units shall be 40. Every degree course shall include the following professional subjects:

1. Laboratory Practice, in Teaching, of which there must be a minimum of 5 units of classroom teaching-----	10 units
2. School Administration, inclusive of School Law-----	2 units
3. Objectives in Education-----	3 units
4. Educational Psychology-----	3 units
5. Civic Education-----	2 units
	20 units

IV. Electives listed under II above, to be administered on the same conditions as specified above-----

40 units

Total-----124 units

A student entering a State Teachers College without 2 years of Mathematics (other than Arithmetic) and 2 years of one Foreign Language must complete (before he receives the Baccalaureate Degree) 1 year (6 units) of Mathematics and 1 year (10 units) of a Foreign Language.

Individuals or groups of individuals wishing to teach before completing the full course may pursue in the lower division the work listed for the upper division. It is understood that such an inversion of sequence is approved that the student may enter the teaching service. If the student fails, after four years, to return to a State Teachers College for the completion of his work, his candidacy for the degree automatically lapses. If he returns after his candidacy has lapsed, the

¹Students must choose at least two fields, each not less than 6 units.

²Not more than 12 units in the Education group is to be allowed in the lower division nor more than 40 units in the upper and lower divisions of the four-year curricula. If the Psychology offered in Roman One is Educational Psychology, the 12 units of Education in the lower division shall include the same.

Not more than a total of 50 units in any one subject or group of subjects listed above is to be allowed in the upper and lower divisions of the four-year curricula.

*The natural science and group electives must be so arranged as to include 12 units of social science and 12 units of biological and physical science during the three years.

work previously taken will be evaluated upon a basis of the requirements in effect at the time of his return.

Each institution is authorized to adjust its several courses for the training of teachers to the minimum requirements herein prescribed, provided that they meet the requirements of the State Board of Education for certification in the various fields.

For graduation from the elementary diploma curriculum, a student is required to do not less than twenty-four (24) units of work in residence, and from any of the four year curricula not less than thirty-two (32) units of work in residence.

PROFESSIONAL COURSES

THE ELEMENTARY DIPLOMA COURSE

Freshman Year		Units of Credit
English Composition 1A-1B	-----	6
Problems of Contemporary Civilization 1A-B-C-D	-----	6
Introductory Principles of Education 1 ¹	-----	3
Introduction to Geography, Elements 1A and Regions 2A	-----	4
Physical Education	-----	1
Electives ²	-----	12
Total	-----	32

Sophomore Year		
Psychology 2A and 2C	-----	6
Primary Curriculum, Ed. IIA ³	-----	2
Mathematics in the Elementary School, Ed. XII	-----	2
Music in the Elementary School, Ed. XVII ⁴	-----	2
Art in the Elementary School, Ed. XIX ⁴	-----	2
Physical Education, LI, LII, LIII	-----	5
Electives ²	-----	13
Total	-----	32

Junior Year		
Public Education in California, Ed. CIII ⁵	-----	2
Education for Citizenship, Ed. CII ⁵	-----	2
Elementary School Curriculum, Ed. CIV	-----	3
Educational Measurements, Ed. CV	-----	3
Science in the Elementary School, Ed. XX	-----	2
Practice Teaching, Ed. CXVI	-----	8
United States Constitution, Pol. Sci. 101 ⁶	-----	2
Electives ²	-----	10
Total	-----	32

¹Students who are planning to teach are sometimes insufficiently grounded in the fundamentals. Classes for remedial work without credit will be formed in Arithmetic, English, Spelling and Handwriting for those needing such assistance.

²Electives must be so chosen that the student will have a total of twelve units of credit in Social Science (Contemporary Civilization, Political Science, History, Economics, Sociology, Anthropology) and twelve units of Biological and Physical Science. They must include six units in Biology and three units in American History unless the student presents recommended grades in these subjects from high school. Not to exceed five units in education may be elected. Electives in the Junior Year must include a minimum of four units in upper division courses in the Liberal Arts curricula.

³In certain exceptional cases this course will not be required, especially when students are qualifying for special credentials.

⁴Students who are not specially proficient in Music and Art or who have not had courses in these subjects in high school will be required to elect Music Coach XVII and Art Coach XVIII as prerequisites.

⁵These are upper division courses and can be taken only by students with 6 units of credit.

⁶Or, preferably, Political Science 1A.

CURRICULA FOR THE A.B. DEGREE

ELEMENTARY SCHOOL COURSE

Freshman Year

	Units of Credit
English Composition 1A-B -----	6
Problems of Contemporary Civilization 1A-B-C-D -----	6
Introductory Principles of Education 1 ¹ -----	3
Introduction to Geography, Elements 1A and Regions 2A -----	4
Physical Education -----	1
Electives ² -----	12
Total -----	32

Sophomore Year

Psychology 2A and 2C -----	6
Primary Curriculum, Ed. IIA ³ -----	2
Mathematics in the Elementary School, Ed. XII -----	2
Music in the Elementary School, Ed. XVII ⁴ -----	2
Art in the Elementary School, Ed. XIX ⁴ -----	2
Physical Education, LI, LII, LIII -----	5
Electives ² -----	13
Total -----	32

Junior Year

Education for Citizenship, Ed. CII ⁵ -----	2
Elementary School Curriculum, Ed. CIV -----	3
Educational Measurements, Ed. CV -----	3
Science in the Elementary School, Ed. XX -----	2
Electives ² -----	20
Total -----	30

Senior Year

Public Education in California, Ed. CII ⁵ -----	2
United States Constitution, Pol. Sci. 101 ⁶ -----	2
Principles of Elementary Education, Ed. CVI -----	3
Practice Teaching, Ed. CXVI -----	10
Electives ² -----	13
Total -----	30

JUNIOR HIGH SCHOOL COURSE

Freshman Year

English Composition 1A-B -----	6
Problems of Contemporary Civilization 1A-B-C-D -----	6
Introductory Principles of Education 1 ¹ -----	3
Physical Education -----	1
Electives ² -----	16
Total -----	32

¹ 2 3 4 5 6. See footnotes to the Elementary Diploma Course. At least ten of the electives in the Senior Year must be upper division courses. Not to exceed forty units of credit in courses in Education may be applied toward a curriculum leading to the degree. The electives must also include one year (six units) of mathematics unless two years of mathematics were taken in high school and one year (ten units) of a foreign language, if not previously taken in high school.

Sophomore Year		Units of Credit
Psychology 2A and 2C-----		6
Physical Education LI, LII, LIII-----		5
Electives ² -----		21
Total -----		32
Junior Year		
Education for Citizenship, Ed. CII ⁵ -----		2
Elementary School Curriculum, Ed. CIV-----		3
Educational Measurements, Ed. CV-----		3
Electives ² -----		22
Total -----		30
Senior Year		
Public Education in California, Ed. CII ⁵ -----		2
United States Constitution, Pol. Sci. 101 ⁶ -----		2
Principles of Junior High School Education and Guidance, Ed. CI-----		3
Practice Teaching, Ed. CXVI-----		10
Electives ² -----		13
Total -----		30

The Junior High School requires departmental teachers who have specialized in particular fields. The electives of this course together with the required subjects, must be so patterned as to include a major of twenty-four units of credit in each of two fields, or a major in a given field and a minor of twelve units in each of two other fields.

For a special recommendation to teach General Science and Biology in the Junior High School, the applicant should satisfy the requirements outlined in the foregoing course and should include in his course a minimum of forty units of science selected from the following list with the approval of the science staff.

	Units of Credit
Biology 10A-10B-----	6
Botany 2A-2B-----	8
Botany 4-----	4
Zoology 1A-1B-----	8
Embryology-----	2
Astronomy 1-----	3
Physics 2A-2B-----	6
Physics 3A-3B-----	2
Chemistry-----	10
Anthropology 1A-1B-----	4
Physiology CXXV-----	4
Seashore Biology 101-----	1
Heredity and Evolution-----	2
Eugenics-----	3
Bacteriology-----	4
Geology-----	2
Ecology (Bot. 101)-----	2
Meteorology-----	2

The thirty-two units of Education required must include the course Education XX, The teaching of Science in the Junior High School, and must include some practice teaching of Junior High School Science.

^{1 2 3 4 5 6}. See footnotes to the Elementary Diploma Course and to the Elementary School Course leading to the A.B. Degree.

*Either Biology 10A-10B and Botany 4, or Botany 2A-2B and Zoology 1A-1B must be included in this list. Students who have taken Chemistry in the high school are not required to take it in college.

†Required subject.

CURRICULA FOR SPECIAL CERTIFICATION

NOTE.—The curricula for special credentials of elementary and junior high school grade must meet the requirement of (a) three years of training (90 to 96 credits) beyond the completion of a standard high school course, or (b) two years of such training and either two years of successful experience in teaching the subject or subjects named in the credential or two years of practical experience in the field of the subject.

The curricula for special credentials of secondary school grade must include (a) four years of training (120 to 128 units) beyond the standard high school course or (b) two or three years of such training and either two to four years of successful experience in teaching the subject or subjects named in the credential or two to four years of practical experience in the field of the subject.

PHYSICAL EDUCATION TYPE (Physical Training Activities)

Credential of Elementary and Junior High School Grade

PROFESSIONAL REQUIREMENTS

For a long-term Credential: The general requirements must include at least twelve (12) units of credit in courses in the Department of Education distributed approximately as follows:

	Units of Credit
1. Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Education for Citizenship-----	2
4. Practice Teaching -----	5
Total-----	12

(Credit for Practice Teaching may be allowed for persons who have had one or more years of successful teaching experience.)

Physical Training Activities: A minimum of training of sixteen (16) units distributed approximately as follows:

	Units of Credit
1. Biology -----	3
2. Human Physiology -----	4
3. Hygiene and First Aid-----	2
4. Growth and Development of the Child-----	2
5. Administration of Physical Education in Elementary and Junior High Schools -----	1
6. Methods in Play Activities-----	3
7. Methods in Formal Activities-----	1
Total-----	16

To the above must be added general professional and general collegiate course sufficient to make a total of at least 90 units.

Credential of Secondary School Grade

PROFESSIONAL REQUIREMENTS

For a long-term Credential: The above general requirements must include at least fifteen (15) units of courses in the Department of Education, distributed approximately as follows:

	Units Credit
1. Principles of Secondary Education-----	2
2. Psychology and Principles of Teaching-----	3
3. Public Education in California-----	2
4. Education for Citizenship-----	2
5. Practice Teaching -----	4
6. Course for Teaching in Special Field-----	2
Total-----	15

¹Must include 6 units in the field of Music and Physical Education, and 6 units in the field of Fine and Industrial Arts.

(Credit for Practice Teaching may be allowed for persons who have had one or more years of successful teaching experience.)

Physical Training Activities: For fully qualified applicants the minimum amount of training required is eighteen (18) units, distributed approximately as follows:

	Units of Credit
1. Biology	3
2. Human Physiology	4
3. Hygiene and First Aid	2
4. Growth and Development of the Child	2
5. Theory of Teaching and Leadership in Physical Education	1
6. Administration of Physical Education in Secondary Schools	2
7. Methods in Play Activities	3
8. Methods in Formal Activities	1
Total	18

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 120 units.

ARTS TYPE

Credentials of Elementary and Junior High School Grade

PROFESSIONAL REQUIREMENTS

The general requirements must include at least 12 units of courses in the department of Education distributed approximately as follows:

	Units of Credit
1. Psychology and Principles of Teaching	3
2. Public Education in California	2
3. Education for Citizenship	2
4. Practice Teaching and Methods Courses	5
Total	12

(Credit for Practice Teaching may be allowed for one or more years of successful teaching experience.)

GENERAL CLASS

For fully qualified applicants: A minimum of forty units of special education and training, suited to the needs of teachers of children of elementary and junior high school grades, and distributed approximately as follows:

	Units of Credit
1. General Freehand and Mechanical Drawing, Lettering, Painting and Design	12
2. Dress Design	2
3. Fabric Design	2
4. Furniture Design	3
5. Home Decoration and Furnishing	2
6. House Design	3
7. Home Grounds Design	1
8. Ceramics	2
9. Clay Art Craft	2
10. Metal Art Craft	2
11. Leather Art Craft	2
12. Art Electives	7
Total	40

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester hours.

MUSIC TYPE

(Public School Music)

Note.—Students may matriculate for this curriculum only upon the fellowship plan outlined on page 19 of this bulletin. Applicants for admission should send complete transcripts of record showing the number of units of work in Music completed toward the forty units of special education and training outlined below.

Credential of Elementary and Junior High School Grade

PROFESSIONAL REQUIREMENTS

The general requirements must include at least twelve units of courses in the Department of Education distributed approximately as follows:

	Units of Credit
1. Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Education for Citizenship-----	2
4. Practice Teaching and Method Courses-----	5
Total-----	12

(Credit for Practice Teaching may be allowed for one or more years of successful teaching experience.)

GENERAL CLASS

For fully qualified applicants: A minimum of forty units of special education and training, suited to the needs of teachers of children of the elementary and junior high school grades, and distributed approximately as follows:

	Units of Credit
1. Voice -----	6
2. Piano -----	4
3. Instruments and Orchestra-----	2
4. Choral -----	4
5. Harmony and Composition-----	8
6. Sightsinging -----	4
7. Ear Training and Music Writing-----	6
8. History and Literature of Music-----	4
9. Music Appreciation -----	2
Total-----	40

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 units.

PREVOCATIONAL TYPE

(Home Making)

PROFESSIONAL REQUIREMENTS

The general requirements must include at least twelve (12) units of credit of courses in the Department of Education distributed approximately as follows:

	Units of Credit
1. Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Courses Designed Particularly to Prepare for Teaching in the Special Field and Practice Teaching-----	5
4. Education for Citizenship-----	2
Total-----	12

(Credit for four (4) units of Practice Teaching may be allowed for persons who have had one or more years of successful teaching experience.)

SPECIAL REQUIREMENTS

A minimum training of thirty-two (32) units of collegiate work distributed approximately as follows:

	Units of Credit
1. Home Art and Design-----	6
2. Home Gardening and Landscaping-----	3
3. Science, Supplementing Household Occupations-----	2
4. Care of House and Housekeeping Processes-----	2
5. Dietetics and Nutrition-----	2
6. Food Study and Cookery-----	6
7. Health, Home Nursing and Child Care-----	3
8. Home Economy and Accounting-----	2
9. Clothing and Home Sewing-----	6
Total-----	32

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 units.

PREVOCATIONAL TYPE

(Occupations and Home Mechanics)

Credential of Elementary and Junior High School Grade

(Offered for the "Limited Class" only)

PROFESSIONAL REQUIREMENTS

The general requirements must include at least twelve units of courses in the department of Education distributed approximately as follows:

	Units of Credit
1. Psychology and Principles of Teaching-----	3
2. Public Education in California-----	2
3. Courses Designed Particularly to Prepare for Teaching in the Special Field and Practice Teaching-----	5
4. Education for Citizenship-----	2
Total-----	12

(Credit for four (4) units of Practice Teaching may be allowed for persons who have had one or more years of successful teaching experience.)

SPECIAL REQUIREMENTS

For Limited Class: A minimum of training in each of a sufficient number of the special subjects listed below (elementary and junior high school grade) to total twenty (20) or more semester hours.

In this class, only short term Credentials may be granted and only in the subjects completed.

For General Class: A minimum of training of forty (40) semester hours distributed approximately as follows:

	Units of Credit
1. Electrical work-----	2
2. Iron Work (forge, sheet metal, pipe fitting, machine work)-----	7
3. Woodwork-----	7
4. Upholstering-----	2
5. Painting, Finishing and Decorating-----	2
6. Leather Work (shoe repair)-----	1
7. Clay and Cement Work-----	2
8. Freehand and Mechanical Drawing-----	4
9. Art Crafts-----	3
10. Basketry and Weaving-----	2
11. Paper and Cardboard Construction-----	2
12. Study of Occupations-----	6
Total-----	40

To the above must be added general professional and general collegiate courses sufficient to make a total of at least 90 semester hours.

NOTE.—For description of the professional courses, see "Education," under the general heading "Courses of Instruction."

REQUIREMENTS FOR THE JUNIOR CERTIFICATE IN THE LIBERAL ARTS CURRICULA

LETTERS AND SCIENCE CURRICULUM

(With the required entrance credits and a proper selection of electives in the freshman and sophomore years, the curriculum in Letters and Science will prepare for the major work required for an A.B. degree in the following subjects: Anthropology, Astronomy, Botany, Chemistry, Economics, Education, English, French, German, Graphic Art, History, Household Art, Household Science, Mathematics, Physical Education, Physics, Political Science, Psychology, Public Speaking, Spanish, Zoology.)

a) General Requirements for All Students.

An examination in Subject A (English Composition).
Hygiene, 1 unit, (Men), 2 units (Women).
Physical Education, 2 units.
Social Ethics.
Problems of Contemporary Civilization, 6 units.
English Composition, 6 units.

b) Foreign Language.

At least 15 units in not more than two languages. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

c) Mathematics.

High school courses in elementary Algebra and Geometry.

d) Natural Science, 12 units.

A maximum of 6 units chosen from the following:

High School Physics,* 3 units.
High School Chemistry,* 3 units.
¹High School Botany, 3 units.
¹High School Biology, 3 units.
¹High School Physiology, 3 units.

A minimum of 6 units chosen from the following:

Astronomy 1, 3 units.
Biology 10A-10B,* 6 units.
Botany 2A*-2B,* 8 units; Botany 4, 3 units.
Chemistry 1A*-1B,* 10 units; 6A*-6B,* 6 units; 8-9,* 6 units.
Geology 1A, 3 units.
Physics 2A-2B, 6 units; 3A-3B,* 2 units; 1A-1B* and 4A-4B,* 12 units.
Zoology, 1A*-1B,* 10 units.

e) Foreign Language, additional to (b) or Mathematics, additional to (c): 6 units chosen from the following:

French: Any two consecutive courses of A, B, C, D, 102A, 102B.
Spanish: Any two consecutive courses of A, B, C, D, 102A, 102B, 105, 105B, 110A, 110B.
German: Any two consecutive courses of A, B, C, D, SC-SD.
Latin: Two years of High School Latin, each year counting as 3 units.
Mathematics: 1A-1B or 3A-3B.

f) History, Economics, Political Science, 6 units, chosen from the following:

History 4A-4B, SA-SB, Economics 1A-1B, Political Science 1A-1B.

*One of the courses marked with an asterisk must be chosen to meet the Natural Science requirements.

¹High school courses in Biological Sciences can not be used to meet the Natural Science requirements of the University of California.

g) Courses preparing for the major.

See subjects listed under each major subject in the descriptive list of courses of instruction, beginning on page 35.

Upper Division

A minimum of 36 units of Upper Division courses is ordinarily required for the degree of A.B. in Liberal Arts curricula in Class A colleges and universities. A minimum of 12 units of this requirement should be met in the junior year. All programs for the junior year should be arranged with the Dean of the College. The San Diego State College does not offer senior work in the Liberal Arts curricula.

COMMERCE CURRICULUM

a) General Requirements.

- An examination in Subject A (English Composition).
- Hygiene, 1 unit (Men), 2 units (Women).
- Physical Education, 2 units.
- Social Ethics.
- Problems of Contemporary Civilization, 6 units.
- English Composition, 6 units.

b) A reading knowledge of French, Spanish, or German, 9 units.

(A high school language may be used to satisfy this requirement in part or in whole, each year-course counting as 3 units.)

c) History 4A-4B, 8A-8B, or Political Science 1A-1B, 6 units, or any combination of the foregoing courses.

d) Geography 1, 3 units, and Geography 2, 3 units.

e) Mathematics of Investment 2, 3 units.

(Prerequisites: Mathematics A and C, or 1A-1B, or their equivalents.

f) Natural Science, 9 units.

(This requirement may be satisfied in part by high school courses in Physics and Chemistry, each year-course counting as 3 units.)

g) Economics 1A-1B, 6 units.

h) Electives.¹

Upper Division

Requirements for senior standing in the Commerce curriculum, besides those of the Junior Certificate, include Accounting 14A-14B, 8 units; Business Law 18A-18B, 3 units; Economic History 11, 3 units; Political Science 101, 2 units; and a minimum of 10 additional Upper Division units. All programs for the junior year should be arranged with the Dean of the College. The San Diego State College does not offer senior work in the Commerce curriculum.

CURRICULUM IN JOURNALISM

The aim of the course in Journalism is twofold: (1) to provide studies in the four departments of instruction—English, History, Economics, and Political Science—which constitute a foundation essential to the successful pursuit of Journalism as a profession; (2) to offer introductory courses in the principles and practice of Journalism, supplemented by lectures of specialists in the field and by practical work in news gathering and writing for student publications and for the local daily press.

	First Year	Sem. I Units	Sem. II Units
English 1A-1B	-----	3	3
Problems of Contemporary Civilization 1A, 1B, 1C, 1D	-----	3	3
Typewriting 2A	-----	2	
Periodic Literature 60	-----		2
Hygiene	-----	1	
Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics	-----		
Electives ²	-----	6	7
		15 $\frac{1}{2}$	15 $\frac{1}{2}$

¹Electives recommended: Psychology 2A-2B, Sociology 50, Public Speaking 1A-1B, Commercial Law 18A-18B, Accounting 14A-14B, additional foreign language.

	Second Year	Sem. I Units	Sem. II Units
News gathering and reporting 51 A ¹	-----	3	
News Editing and Correspondence 51B ¹	-----		3
At least 12 units chosen from Psychology 2A-2B, History 4A-4B, Economics 1A-1B, Political Science 1A-1B	-----	6	6
Physical Education	-----	$7\frac{1}{2}$	$7\frac{1}{2}$
Electives ²	-----	7	7
		16 $\frac{1}{2}$	16 $\frac{1}{2}$

PRELEGAL CURRICULUM

- a) The requirements of the Letters and Science curriculum or, in special cases, the Commerce curriculum should be met in full.
- b) Electives recommended:
- History 4A-4B, 6 units.
 - Economics 1A-1B, 6 units.
 - Political Science, 1A-1B, 6 units.
 - Public Speaking, 1A-1B, 6 units.
 - Mathematics 1A-1B, 6 units.
 - Sociology 50, 3 units.
 - Psychology 2A-2B, 6 units.
 - Accounting 14A-14B, 8 units.
 - Business Law 18A-18B, 6 units.

PREMEDICAL CURRICULUM

- a) The requirements of the Letters and Science curriculum should be met in full.
- b) Additional requirements:
- Chemistry 1A-1B, 10 units.
 - Chemistry 8-9, 6 units.
 - Zoology 1A-1B, 10 units.
 - A reading knowledge of German or French (3 years of High School German or French or 10 units of college German or French).
- c) Electives recommended:
- Physics 2A-2B, 6 units.
 - Physics 3A-3B, 2 units.
 - Chemistry 6A-6B, 6 units, Chemistry 101-102, 8 units.
 - Art A, 2 units, Mechanical Drawing C, 3 units.

PREDENTAL CURRICULUM

- a) The requirements of the Letters and Science curriculum should be met in full.
- b) Additional requirements:
- Chemistry 1A-1B, 10 units.
 - Chemistry 8-9, 6 units.
 - Zoology 1A-1B, 10 units, or Biology 10A-10B, 6 units.
 - Physics 1A-1B, 6 units, or 2A-2B and 3A-3B, 8 units.

PREARCHITECTURAL CURRICULUM

- a) The requirements of the Letters and Science curriculum should be met in full.
- b) Additional requirements:
- Mathematics 3A-3B, 6 units.
 - Mathematics 4A-4B, 6 units.
 - Physics, 1A-1B, 6 units
 - Art A-B, 4 units.
 - Art 6A, 2 units.
 - Art 12B, 2 units.
 - Descriptive Geometry 3D, 3 units.

¹With the consent of the instructor, News Gathering and News Editing may be taken in the freshman year.

²Electives should be chosen so as to conform to the requirements of the Letter and Science curriculum or the Commerce curriculum.

Electives recommended: Shorthand, Accounting, 14A-14B, Business Law 18A-18B, Art History and Appreciation 1A-1B, Art Structure 6A, Music History an Appreciation 3A-3B, Great Books 4, Types of Literature 52A-52B, Anthropology 1A-1B, Sociology 50.

- c) Electives recommended:
 Art 1A-1B, 4 units.
 Art 6B, 2 units.

SOCIAL SERVICE CURRICULUM

- a) The requirements of the Letters and Science curriculum should be met in full.
 b) Electives recommended:
 Economics 1A-1B, 6 units.
 Psychology 2A-2B, 6 units.
 Anthropology 1A-1B, 4 units.
 Sociology 50, 3 units.
 Social Psychology 145, 3 units.
 Field Studies 149, 2 units.
 Biology 10A-10B, 6 units.

MECHANICAL, ELECTRICAL, CIVIL AND MINING ENGINEERING CURRICULA

First Year		Sem. I Units	Sem. II Units
Mathematics 3A-3B	-----	3	3
Physics 1A-1B	-----	3	3
Chemistry 1A-1B	-----	5	5
Plane Surveying 1A-1B	-----	3	3
Problems of Contemporary Civilization 1A, 1B, 1C, 1D	-----	3	3
Hygiene 1	-----		1
Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics	-----		
		17 $\frac{1}{2}$	18 $\frac{1}{2}$
Second Year			
<i>Mechanical and Electrical Engineering</i>			
Mathematics 4A-4B	-----	3	3
Physics 1C-1D	-----	3	3
Descriptive Geometry 3D	-----	3	
Machine Drawing and Design 6A	-----	1	4
Applied Mechanics 1A	-----	3	
Electrical Engineering 1	-----		3
Pattern Shop 8A-8B	-----	2	2
Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$
English Composition	-----	3	3
		18 $\frac{1}{2}$	18 $\frac{1}{2}$
<i>Civil Engineering</i>			
Mathematics 4A-4B	-----	3	3
Physics 1C-1D	-----	3	3
Descriptive Geometry 3D	-----	3	
Geology 1A	-----		3
English Composition	-----	3	3
Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$
Railroad and Irrigation:			
Applied Mechanics 1A	-----	3	
Pattern Shop 8A-8B	-----	2	2
Electives	-----	1	4
		18 $\frac{1}{2}$	18 $\frac{1}{2}$
Sanitary and Municipal:			
Chemistry 8-9	-----	3	3
Chemistry 6A-6B	-----	3	3
		18 $\frac{1}{2}$	18 $\frac{1}{2}$

CURRICULUM IN INDUSTRIAL AND ENGINEERING CHEMISTRY

	First Year		Sem. I Units	Sem. II Units
Mathematics 3A-3B -----			3	3
Physics 1A-1B -----			3	3
Chemistry 1A-1B -----			5	5
English Composition -----			3	3
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----			3	3
Hygiene 1 -----			—	1
Physical Education -----			$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----			—	—
			17 $\frac{1}{2}$	18 $\frac{1}{2}$
	Second Year			
Mathematics 4A-4B -----			3	3
Physics 1C-1D -----			3	3
Chemistry 6A-6B -----			3	3
Chemistry 8-9 -----			3	3
German A-B -----			5	5
Physical Education -----			$\frac{1}{2}$	$\frac{1}{2}$
			17 $\frac{1}{2}$	17 $\frac{1}{2}$

CURRICULUM IN AGRICULTURE

	First Year			
Chemistry 1A-1B -----			5	5
Zoology 1A (or Biology 10A-10B, 6 units) -----			5	
Botany 2A-2B -----			4	4
Hygiene 1 -----			1	
Physical Education -----			$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----			—	—
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----			3	3
Electives* -----			—	6
			18 $\frac{1}{2}$	18 $\frac{1}{2}$
	Second Year			

The program for the second year should be arranged with the assistance of the Dean of the College.

CURRICULA IN ACCOUNTANCY AND SECRETARIAL TRAINING

The aim in giving courses in Accountancy and in Secretarial Training is to offer a business preparation of college grade. The courses are open to high school graduates who majored in commercial subjects as well as to those who have had no training for business. Candidates of not less than twenty-one years of age who have not completed four years of high school work may also be admitted as special students. The curricula have been formulated with a recognition of the varying needs of those who plan to engage actively in commercial pursuits. To this end, courses of one and of two years in length are provided in Accountancy and in Secretarial Training, or in a combination thereof. A minimum of sixty-four units of credit is required for a certificate.

It is the intention in the different courses to encourage individual research work in order that the student may become more resourceful, self-reliant, and keener to analyze and cope with business conditions and problems. To furnish material for this work, the city of San Diego will be used as a laboratory, through the cooperation of merchants, manufacturers, transportation men and financiers.

One-Year Course	ACCOUNTANCY		Sem. I Units	Sem. II Units
Accounting 14A-14B -----			4	4
Commercial Law 18A-18B -----			3	3
English Composition -----			3	3
Business Mathematics A -----			1	
Typewriting 1A-1B -----			4	4

*Electives should be chosen so as to meet the following requirements, including matriculation credit, before the end of the freshman year. (Each high school year course counts as 3 units.) English, 12 units; Mathematics, including Trigonometry 9 units; Physics, 3 units; History or Economics, 9 units; Mechanical Drawing 3 units.

	Sem. I Units	Sem. II Units
Social Ethics -----	---	---
Hygiene -----	1	---
Elective -----	---	2
	16	16
Two-Year Course (leading to Certificate in Accountancy)		
First Year		
Accounting 14A-14B -----	4	4
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	1	---
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----	3	3
Hygiene -----	---	1
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----	---	---
Elective -----	3	3
	15 $\frac{1}{2}$	15 $\frac{1}{2}$
Second Year		
Advanced Accounting 60A-60B -----	3	3
Commercial Law 18A-18B -----	3	3
Economics 1A-1B -----	3	3
English Composition -----	3	3
Office Methods 3A -----	---	3
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Electives -----	3	---
	15 $\frac{1}{2}$	15 $\frac{1}{2}$
One-Year Course SECRETARIAL TRAINING		
Accounting 14A -----	4	---
Shorthand 1A-1B -----	5	5
Typewriting 1A-1B -----	4	4
English Composition -----	3	3
Business Mathematics A -----	---	1
Office Methods 3A -----	---	3
Social Ethics -----	---	---
	16	16
Two-Year Course (leading to Secretarial Certificate)		
First Year		
Shorthand 1A-1B -----	5	5
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	1	---
Hygiene 2 -----	---	2
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----	---	---
Problems of Contemporary Civilization 1A, 1B, 1C, 1D -----	3	3
Electives* -----	3	3
	16 $\frac{1}{2}$	17 $\frac{1}{2}$
Second Year		
Commercial Law 18A-18B -----	3	3
Office Methods 3A -----	---	3
Economics 1A-1B -----	3	3
Accounting 14A-14B -----	4	4
English Composition -----	3	3
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Electives* -----	3	---
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

*Students who plan to enter the consular service should elect Political Science 1A-1B, 6 units, and a foreign language.

ACCOUNTANCY AND SECRETARIAL TRAINING

	Sem. I Units	Sem. II Units
First Year		
Accounting 14A-14B -----	4	4
English Composition -----	3	3
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	1	
Problems of Contemporary Civilization 1A, 1B, 1C, 1D-----	3	3
Hygiene -----	—	1
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----	—	—
	15 $\frac{1}{2}$	15 $\frac{1}{2}$
Second Year		
Advanced Accounting 60A-60B-----	3	3
Commercial Law 18A-18B-----	3	3
Office Methods 3A-----	—	3
Economics 1A-1B -----	3	3
Shorthand 1A-1B -----	5	5
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Electives -----	2	
	16 $\frac{1}{2}$	17 $\frac{1}{2}$

COURSES OF INSTRUCTION, 1925-26

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks. Credit for 64 units, or more, according to the course chosen, is required for a certificate.

Courses numbered from 1 to 99 and I to XCIX are freshman or sophomore (lower division) courses; those numbered from 100 to 199 and C to CXCIX are junior or senior (upper division) courses, available only, except by special arrangement, to students in the professional courses. Courses similar to those of the University of California are designated by the numbers used by the University.

ANTHROPOLOGY

Preparation for the major in Anthropology: Anthropology 1A, 1B. The major (junior year): Anthropology 103 and 104; Zoology 114 and 115.

1A. General Anthropology: Origin and Antiquity of Man HEWETT
Man as an animal; heredity; races and race problems; earliest culture.
Two units; one semester.

1B. General Anthropology: Origin and Development of Civilization HEWETT
The source and growth of institutions, art, customs, industries, language, and religion. Prerequisite: Anthropology 1A.
Two units; one semester

03. Outlines of Culture Growth HEWETT
Human origins and classification; beginnings of culture; growth of civilization in the great centers of Egypt, Europe, and Asia; diffusions in Africa and Oceania; isolated and marginal peoples; world religions and international contracts.
Three units; one semester.

04. Culture History of the Southwest HEWETT
Origin and culture of the Indians of the Southwest; their arts, customs, industries, beliefs.
Three units; one semester.

ASTRONOMY

Preparation for a major in Astronomy: Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-3B, Physics 2A-2B and 3A-3B or 1A-1B and 1C-1D, a reading knowledge of French or German.

Descriptive Astronomy SKILLING
This cultural course is planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are made. Especial attention is given to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with a 6-inch Alvin Clarke telescope is used for observation. Also a good selection of lantern slides is used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry.
Three units; either semester.

BOTANY

Preparation for the major in Botany: Botany 2A-2B, High School Chemistry and its equivalent.

A. General Botany COY
A study of the fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.
Four units; first semester.

B. General Botany COY
A continuation of 2A treating morphology and relationships of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.
Four units; second semester.

4. California Plants

Coy

Lectures, laboratory exercises and field work on the classification and ecology of plants of the San Diego region. One lecture and two three-hour laboratory periods per week.

Three units; second semester.

101. Plant Communities

Coy

A study of plants in relation to environment; the development of plant associations and the factors influencing plant distribution. Lectures, assigned readings and reports.

If a sufficient number desire additional work in this course a third unit will be allowed for three hours of field work on Saturdays. Prerequisite: Botany

2A-2B or equivalent.

Two units; second semester.

BIOLOGY

For courses under this head see Botany, Nature Study (p. 42), Physiology (p. 43), and Zoology.

CHEMISTRY

Preparation for a major in Chemistry, required: Chemistry 1A-1B, with a grade of C or better. Chemistry 6A-6B, 8-9, Physics 2A-2B or 1A-1B, Mathematics C and 3A-3B, or their equivalents, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

The major (junior year): 101, 102, 123, 124.

1A-1B. General Chemistry

PIERCE, GILKEY

The course is designed to give the student a thorough understanding of the fundamental principles and theories of Chemistry and their applications in everyday life, as well as to meet the requirements for further work along chemical lines. Two hours lecture and one quiz and two laboratory periods per week. Second semester laboratory. Qualitative Analysis throughout. Prerequisite: High School Chemistry or High School Physics and Trigonometry.

Five units throughout the year.

6AA. Qualitative Analysis

PIERCE

A study of qualitative separations and theories as applied not only to solutions but to ores, slags, alloys, and solid salts. One hour lecture and quiz, three laboratory periods. Prerequisite: Chemistry 1A-1B.

Four units; first semester.

6A-6B. Introductory Quantitative Analysis

PIERCE

The work consists of determinations by gravimetric, volumetric and electroanalysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Three units; throughout the year.

8-9. Organic Chemistry

GILKEY

A study of the carbon compounds (aliphatic and aromatic) and their derivatives, including the synthesis of different compounds and the proof of their constitution. A general consideration of the subject and the principles involved. Two lectures or quiz and one laboratory period, first semester; one lecture or quiz and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B.

Three units; throughout the year.

101-102. Advanced Inorganic Chemistry

PIERCE

The course treats of the laws and theories of elementary work from the viewpoint of physical chemistry. The laboratory work covers such typical items as gas laws, mol weights, laws of combination, Ionization, Equilibria (homogeneous, heterogeneous and complex) and electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: 1A-1B, 6A-6B, 8-9.

Four units; throughout the year.

123-124. Organic Preparations

PIERCE

A laboratory course illustrating some of the more important synthetic methods of Organic Chemistry. A reading knowledge of German is desirable. Laboratory and conferences. Prerequisite: 8-9. Hours to be arranged.

Two to five units; throughout the year.

CONTEMPORARY CIVILIZATION

A study of the interests, activities and problems of the present with particular reference to intelligent citizenship; an orientation course planned to furnish a basis for further study and to develop a scientific attitude in the analysis and solution of problems in the field of human engineering. Lectures, discussions, quizzes, and collateral reading. Required of all freshmen. One and one-half units each quarter of the year.

1A. Psychology and Philosophy

BELL

1B. Economics and Sociology

A. G. PETERSON

1C. History and Political Science

POTTER

1D. Recent Literature

OUTCALT

ECONOMICS

Preparation for a major in Economics, Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 2A-2B; Geography 1 and 2. Recommended: Sociology 50, Accounting 14A-14B. Commercial Law 18A-18B.

The major (junior year): Six Upper Division units in History or Geography.

A. Social Ethics

COLDWELL

Required of all entering students. This course aims to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society—of men to society. One hour per week for 9 weeks.

A-1B. Principles of Economics

A. G. PETERSON

A careful consideration is given to the basic principles of Economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wages, and profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs; transportation corporations, labor problems, socialism, taxation, etc. The aim of the course is (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and (3) to introduce the future citizens to the political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Three units; throughout the year.

1. Economic History of the United States

A comprehensive survey of American economic development and of national legislation in the field of industry.

Three units; first semester.

2. General Sociology

KELLEY

The object of the course in Sociology is twofold: To familiarize the student with the forces and laws under which society is formed and to bring him so far as possible into touch with specific contemporary problems, so that he may adapt himself with greater facility to his responsibilities as a member of the social group and as a citizen. General Sociology includes the study of the antiquity of man, racial evolution, religion, morals, customs, laws, family and state and the biological, economic and psychological aspects of society. Lectures, discussions, quizzes with a text and collateral reading. Not open to freshmen. Prerequisites: Recommended: Economics A-1B, Biology 10A-10B and Psychology 2A-2B.

Three units; one semester.

145. Social Psychology

(See Psychology.)

149. Field Studies

A. G. PETERSON

Scientific methods of social and industrial field work and investigation; methods of securing data; classification, tabulation and interpretation of field work data. Each member of the class is required to assist in a survey of a definite field of work in cooperation with social and industrial organizations of San Diego and under the direction of the instructor in charge of the course. May be taken concurrently with Sociology 50. Prerequisites: Required: Sociology 50. Recommended: Psychology 2A and Economics 1A-1B.

One or two units; one semester.

18A-18B. Commercial Law

STANTON

The object of the course in Commercial Law is to give clearly and concisely the leading and fundamental principles of Business Law. Simple cases showing the actual application of the principles to commercial and business transactions are given, rather than development of those principles. The subjects covered are contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance and wills, with a brief study of evidence.

Three units; throughout the year.

1A-1B. Typewriting

AMSDEN

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms; tabulation and billing; specifications; legal forms and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit is given for this course except in the curricula in Accountancy and Secretarial Training. Ten hours lecture and laboratory practice.

Four units; throughout the year.

2A. Typewriting

AMSDEN

A short course designed for those who do not wish to enter the business office but desire a knowledge of the use of the typewriter. Five hours laboratory practice. Ordinarily no credit is given for this course.

Two units; either semester.

1A-1B. Stenography

AMSDEN

An intensive course designed for the practical preparation of office secretaries. A thorough study is made of the Gregg System and the ability to read and write shorthand rapidly and correctly, both literary and commercial, is developed. The shorthand speed necessary to pass a Civil Service examination is attained by the end of the year. Ordinarily no credit is given for this course except in the curricula in Accountancy and Secretarial Training.

Five units; throughout the year.

2A. Stenography

WRIGHT

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches and literary material.

Three units; second semester.

3A. Office Methods and Appliances

WRIGHT

Practice and principles of office management, including organization, arrangement and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and bookkeeping machines. Trips are made to local establishments to study at first hand actual business conditions. Prerequisite: Typewriting 1A or its equivalent.

Three units; second semester.

A. Business Mathematics

WRIGHT

A practical course in the Mathematics of Business. The ability to add, subtract and divide rapidly and accurately is developed. A thorough study is also made of

interest, compound interest, discount, amortization tables, insurance rates, etc. Credit is given only in the curricula in Accountancy and Secretarial Training.

One unit; first semester.

4A-14B. Accounting

WRIGHT

A knowledge of bookkeeping is not required nor is it of advantage. A study is made of the balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions and consolidations; branch store accounting, etc., keeping in view the best modern accounting practice. Eight hours lecture and laboratory.

Four units; throughout the year.

50A-60B. Advanced Accounting

WRIGHT-EVERTS

The second year consists of an intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory.

Three units; throughout the year.

EDUCATION

Education—Introductory Principles

JOHNSON, AULT

This is the first required course in the study of education and has as its purpose the orienting of the mind of the student toward education and teaching. A preliminary survey of the field is made and of the theories and general principles applying to education in a modern democratic society. It also functions as a course in vocational guidance in that it seeks to acquaint the student with the qualities needed for success in teaching and helps him to appraise his own possibilities.

Three units; either semester.

Primary School Curriculum

HAMMACK

A study of the activities of the first three grades of the elementary school. Special emphasis is placed upon beginning reading and frequent demonstration lessons are conducted.

Two and one-half units; either semester.

I. Principles of Junior High School Education

HARDY

This course deals with the principles of educational science that should underlie the organization, administration and curriculum of the secondary school, especially in the junior high school field. The prevailing patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to that of articulation of the secondary school with the lower and higher schools.

Two units; one semester.

II. Education for Citizenship

NIDA

An analysis of the ideals and habits essential for good citizenship followed by a study of the part which each school subject and activity contributes to their development.

Two units; either semester.

III. Public Education in California

HARDY

A study of the structure, organization and administration of the California school system, as given in the school law of the state, and as interpreted by the rulings of the State Superintendent of Public Instruction, the Attorney General and the California courts. It is intended to give to prospective teachers a conception of the historical development and the main features of the California school system.

Two units; either semester.

CIV. Elementary School Curriculum

AUT

A study of the materials and activities of the elementary school and of accepted techniques in teaching. A summary and evaluation is made of the results of scientific investigations in this field. Special emphasis is placed on the teaching of English.

Three units; either semester.

CV. Intelligence Testing

BE

A brief review of the history and rationale of Intelligence Testing is followed by a discussion of the Stanford revision of the Binet-Simon Test, with demonstration and practice. The best group tests of intelligence are discussed and demonstrated. Experience in giving, scoring and interpreting results is required. The purpose of this course is to give teachers information on the subject, to enable each student to find out if by inclination and endowment he is fitted to do scientific testing and to put him in the way of becoming skilled in giving and interpreting intelligence tests.

Three units; one semester.

CVI. Principles of Education

JOHNS

This course is designed as a culmination of the studies of Education and its procedure. It is a study of the biological, psychological and social principles underlying modern Education, in connection with the demands of modern society in a complex social, economic and scientific world, with a view to the formulation of a working philosophy for the educative process.

Two units; one semester.

CVII. History of Education

BELL, HARR

The course includes a brief study of early Hebrew, Greek, Roman and early Christian Education, of the changes brought about by the Renaissance, of the transition to modern secular Education, and includes brief reviews of the educational philosophies of the great reformers, together with a concluding study of the development of the American school system and of American ideals and practices in education.

Three units; one semester.

CVIII. Educational Measurements

BE

This course consists of a brief survey of the history of scientific measurement in the elementary field, and a study of the nature of intelligence tests, especially of the practical uses of group intelligence tests. The greatest stress, however, is laid upon the practical uses of achievement tests. The Stanford Achievement Tests given in the entire training school and to many college students furnish a great part of the data used. Simple statistical training in handling data is acquired through practical problems.

Three units; either semester.

CIX. Educational Administration

JOHNS

A survey of the systems of organization, classification and promotion of pupils and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc.

Two units; one semester.

CX. Educational Supervision

JOHNS

A study of types of supervision and methods of evaluating and improving teaching.

Two units; one semester.

CXVI. Practice Teaching

Systematic observation, participation and actual teaching under competent supervision in the Training School and in the city schools of San Diego. A limited amount is also afforded in rural and ungraded schools. As a general rule a student teaches a fifty-minute period daily for one semester and a half-day each school day for nine weeks.

Eight units.

CXVII. Children's Literature

CORBETT

This is a detailed study of the literature for children as a basis for the appreciation, selection and presentation of suitable material for the elementary school grades. It includes practice in story-telling and dramatization.

Two units; one semester.

CXVIII. Class Management

CORBETT

A discussion of the problems arising in connection with schoolroom discipline; methods of securing a wholesome school "spirit" and the application of civic principles to school life.

Two units; one semester.

THE STATUTORY CURRICULUM (Elementary School)

NOTE.—The courses listed under this head do not include reviews of elementary school subject matter. They are professional courses, and presuppose a reasonable mastery of the materials of the elementary school curriculum and of the general curriculum of the secondary school.

XI. Language

This course includes a study of the psychology and hygiene of reading, with a study of methods and materials suitable for the equipment of the elementary school teacher, and with a study, also, of the teaching of writing and spelling.

Two units; one semester.

XII. Mathematics

RICHARDS

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics, together with study and observation of the newer methods as used under ordinary classroom conditions.

Two units; one semester.

XIII. Introduction to Geography

CLARK

This course includes a study of the fundamental principles of Geography and their adaptation to teaching Geography in the elementary schools. Required of all students working for a teacher's elementary school certificate.

Two units; one semester.

XIV. History

PEEK

A course in the development of civilization beginning with ancient times, stressing the characteristics of successive periods and building a cultural background for the history of the elementary school.

Two units; one semester.

XV. Music Coach

D. SMITH

A course in the rudiments of music and in elementary theory; study of major and minor scales (three forms), intervals, correct notation, music terminology and sight singing in one, two and three parts. Advanced students are excused from this course by special examination.

No credit; either semester.

XVI. Music in the Elementary School

D. SMITH

Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting songs, ear training, elementary notation, sight singing, and part singing. Connecting. Prerequisite: Music XVII or its equivalent.

Two units; either semester.

XVII. Art Coach

BENTON, HUNTER

Study of fine examples of painting, architecture, sculpture and handicraft. Problems are intended to give a practical working knowledge of design and color theory.

No credit; either semester.

XIX. Art in the Elementary School

BENTON

Prerequisite: Art I or its equivalent. This course is a practical application of the elements and principles of Art to problems for grades 1-6. It is presented through lectures, reports, demonstration lessons and laboratory work.

Two units; either semester.

XX. Natural Science in the Elementary School

SKILLING

The course aims to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades).

Two units; either semester.

XXII. Geography Material for the Elementary School

CLARK

This course aims to familiarize the students with the various geographical readers, with the magazines valuable in the work, with the different kinds of wall and desk maps, and also with concrete geographical exhibits—all with reference to the elementary school, grades 3 to 6.

Two units; second semester.

XXVI. Home Floriculture

SKILLING

A study of ornamental gardening to familiarize students with material used in gardening and methods of propagation. A part of the work consists in lath house practice and visits to nurseries, green houses and florists. The course is especially designed to furnish a part of the equipment needed by those intending to teach nature study and general science.

Two units; second semester.

COURSES FOR SECONDARY SCHOOL TEACHERS IN THE JUNIOR HIGH SCHOOL FIELD

Organization and Administration (see Education CIII, CIX and CX)

CXI. English

OUTCALT, BAGLE

This course consists of the following items: (a) Lectures and required paper on the objectives of secondary school work in English and on these selection an interpretation of materials; (b) of the study of methods with respect to pupil abilities and activities; (c) of observation of the work in the city schools.

Two units; one semester.

CXII. Mathematics

RICHARD

The subject matter, management of it and methods of teaching it in a junior high school curriculum in general mathematics, make up the principal topics of the course. Specific problems discovered include the application of arithmetic in current social and business life, intuitive geometry, graphic representation and the phases of algebra suitable to the junior high school pupil, together with the problem of making the work useful in preparation for senior high school mathematics.

Two units; one semester.

CXIII. Geography

CLARK

This course deals, first, with the subject matter suitable for secondary school particularly the junior high school, and with the arrangement and interpretation of this subject matter; second, with the problems of teaching geography in the junior high school grades. Lectures, papers, readings and observations are included.

Two units; one semester.

CXIV. Social Science

NE

This course for prospective junior high school teachers attempts to meet the problem of the teaching of some of the elementary facts and principles of a "general social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography and civics. Methods of securing direct experience and training through suitable school and other survey and study projects, and of developing

genuine and continuing interest in social and civic problems through observation and reading, will be discussed and illustrated.

Two units; one semester.

CXV. History

POTTER

A study of subject matter, organization, materials and methods for the teaching of history in the junior high school. The course includes a study of text books, maps, pictures and other material.

Two units; one semester.

CXIX. Art in the Junior High School

BENTON

Prerequisite: XVIII and XIX. This course is for third year Art students working for the Special Art Certificate of Elementary and Junior High School grade.

CXX. The Teaching of Science in the Junior High School

SCIENCE STAFF

A course in the content, methods, field work, textbooks, laboratory work, equipment, and reference readings for Junior High School Science. Prerequisite: 18 units of College Science.

Two units; throughout the year.

CXXIV. Romance Languages

BROWN

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value.

Two units; one semester.

CXXV. Physiology

COY

A study of the human body. Lectures and laboratory exercises on the physiology of the several systems of organs with emphasis on the applications to hygiene and physical education. A brief survey of human histology and a vertebrate dissection furnish the necessary facts of structure.

Two lectures and two three-hour laboratory periods per week.

Four units; first semester.

PHYSICAL EDUCATION FOR TEACHERS

I. Child Hygiene

TANNER

A course for professional students which includes:

The phenomena of reproduction, sex and the influencing factors of environment; prenatal and postnatal development; glands and internal secretion, their influences and reactions; growth periods; diseases, physical defects and health indices of school children; teaching of hygiene in the elementary school. Lectures, demonstrations, reports and discussions.

Two units; either semester.

II. Play Activities

TANNER

The required Physical Education for the second semester consists of intensive playing of a large range of games. The course does not deal with highly specialized athletics.

Note books are required in order that the student teachers may be provided with tested game material.

One-half unit; either semester.

III. Administration of Physical Education Program in Elementary and Junior High Schools

TANNER

Materials and methods noted in the state program of Physical Education are studied. Emphasis is placed upon athletic tests, group activities under student leadership, the administration of the "relief" and play periods and the means of securing better postures. Standards and practices in health measurements as applicable to elementary school children, and the treatment of school emergencies are included. Lectures, demonstrations and individual study of important problems.

Two units; either semester.

CLI. Methods in Formal Activities

TANNER, C. E. PETERSON

(For Elementary and Junior High Schools.)

(a) A systematic study of the principles and technique of teaching physical training activities.

(b) A study of the selection, classification, arrangement and progression of formal activities. The responsibility of the physical instructor toward the problems of age, growth, and sex variations as affected by exercise is stressed.

One unit; one semester.

For descriptions of the courses in Biology, Physiology, Hygiene, etc., required for special certification in Physical Education, see those subjects in the list of general collegiate courses.

CLII. Theory of Teaching and Leadership in Physical Education TANNER

A consideration of the elements and the teaching process in Physical Education; the application of Psychology to leadership; the physical, mental and social equipment of the successful physical instructor.

One unit; one semester.

CLIII. Methods in Play Activities C. E. PETERSON

Methods and materials used in intra- and inter-class games, with special reference to mass competition. Problems of classification, selection, organization and management of inter-school contests and relations. Discussion of honor societies, trophies, awards and sportmanship code.

Three units; one semester.

CLIV. Administration of Physical Education Program in Secondary Schools PETERSON

A study of interclass and intramural activities, with marked attention to methods of competition; consideration of games and sports (not specialized athletics) suited to the interest and physical needs of high school pupils; the relation of the instructor of Physical Education to the moral, social and hygienic problems of the high school.

Two units; one semester.

CLV. Practice Teaching in Physical Education TANNER, PETERSON

Skill in teaching games, athletic sports, in the use of Decathlon Events and Tests and in gymnastic drills is expected. Training School and College classes are used in Practice Teaching. Prerequisites: Theory of Teaching and Leadership, a course in the Organization of Physical Education Program for the school group to be taught and a course in Games.

Five units.

INDUSTRIAL ARTS

LXI. Elementary Industrial Arts BENTON

Practical problems in the handling of industrial materials adapted to the grades, such as clay modeling and pottery, paper making, bookbinding, weaving, basketry, etc. Also the study of related subject matter and methods.

Three units; one semester.

LXII. Elementary Woodwork SCUDDER

This course will show the possibilities of Woodwork in the elementary grades. The reading of blueprints, the development of simple wood finishes, and study of the important woods form an essential part of the course. Shop work, demonstrations and lectures.

a) Study of woods and their working qualities, paints and enamels, mixture and application, making various silhouette and mechanical toys.

b) Tool operations and the application of constructional principles suitable for sixth and seventh grade work. An analysis of tools and principles involved. Care and adjustment of tools, etc.

All projects adapted to grade work and classified by grades.

Three units; one semester.

XIII. Advanced Woodwork

SCUDDER

Tool operations and the application of constructional principles suitable for eighth grade work. An analysis of tools and principles involved. Proper care and adjustment of tools. Attention is given to the various methods of assembling, and several different finishes are developed. Projects are to a large extent typical of the eighth grade and include original designs. Shop work demonstrations and lectures.

Three units; one semester.

XIV. Industrial Arts—Cabinet Work

SCUDDER

Elementary cabinet work. Tool and machine operations involving mortise and tenon joints. At least one simple problem in upholstering. Proper use of various tools in assembling. Excursions to study various types of furniture.

Three units; one semester.

XV. Industrial Arts—Cabinet Work (advanced)

SCUDDER

Tool, machine operation and finishing processes naturally included in cabinet work are taught. Advanced finishing operations are demonstrated. Upholstering or painting must be included in this project. Study of fine cabinet woods and selection of materials.

Three units; one semester.

XVI. Industrial Arts—Concrete Work

SCUDDER

This course includes the study of materials and their values in the different structures. The proper mixture of concrete for different purposes and simple reinforcement, as used in posts, beams, tanks, walls, etc. Each student will make practical application of the above in the laboratory by making small test beams and breaking on small machine of compound levers, and by making a series of small useful and practical projects, as well as some larger class projects.

Two units; one semester.

XVII. Industrial Arts Organization

SCUDDER

Classification of industrial arts from which men make a livelihood. General organization of material and its value, as well as methods of presentation. Classification of tools, tool operations and projects. Planning of courses from fifth grade through high school. Equipment costs and installation.

Two units; one semester.

NOTE.—For descriptions of the additional courses in special subject matter fields, required for special certification of the various types outlined under "Curricula for Special Certification," see the lists of courses under the head "Courses of Instruction."

ENGINEERING

Mechanical Drawing

STOVAL

This course is designed to train students in lettering and in neatness and accuracy in the use of instruments. Geometric problems, shop problems, theoretical problems with developments, warped surfaces with developments and penetration of prisms, pyramid and prism, cylinder and prism, cone and cylinder, and other similar problems are studied. Mechanical Drawing C is substantially equivalent to the high school course in Mechanical Drawing.

Three units; either semester.

Descriptive Geometry

STOVAL

In this course 21 or more plates are required and four examinations given. The problems deal with the customary problems of points, lines, planes, perpendiculars, parallels, distances, angles, solids, developments, warped surfaces, intersections, etc. The aim of the course is to create originality, and to develop the ability of the student to visualize and present on paper problems which are theoretical or practical. Prerequisite: Mechanical Drawing C or the high school course in Mechanical Drawing.

Three units; either semester.

Machine Drawing and Design

STOVAL

Function of machines; motion, force, and work in machines; analysis of mechanism; velocity, acceleration, and effort diagrams; parallel motions, cams; ratchets;

toothed wheels; valve gear and design. Three lectures and two drafting periods.
Prerequisite: Descriptive Geometry 3D.

Five units; second semester.

1A-1B. Plane Surveying

STOVALL, LIVINGSTON

Use and adjustment of surveying instruments, computations and map-making, together with a study of land, topographic, city and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisites: Trigonometry and Mechanical Drawing.

Three units; throughout the year.

8A-8B. Pattern Making

SCUDDE

The aim of this course is to acquaint the student with as wide variety of patterns as possible, in order to develop his knowledge of construction and broaden his view of the industries. Instruction is given in the principles of pattern construction, and the uses of the shrink rule, the finish allowance, draft allowance, fillet, etc. The correctness of design and necessity for the various allowances are proved by actual moulds and castings made from one-piece and split patterns. Excursions to pattern shops and foundries. Laboratory plan.

Two units; throughout the year.

1A. Applied Mechanics

STOVALL

Problems concerning the action of external forces on rigid bodies; composition and resolution of forces; equilibrium; rectilinear and curvilinear motion; acceleration, linear and angular; harmonic motion; translation and rotation; moment of inertia; kinetic and potential energy; work, power, friction; machines; efficiency. Prerequisites: Mathematics 3A-3B and Physics 1A-1B.

Three units; first semester.

1. Elements of Electrical Engineering

STOVALL

A general survey of the field of Electrical Engineering. Single and polyphase circuits, power-factor, reactance, generators, motors, transformers, and transmission of power. Prerequisites: Mathematics 3A-3B and Physics 1C.

Three units; second semester.

ENGLISH

Preparation for a major in English—six units from English 1A-1B, and six units from 56A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

The major (junior year): A minimum of six units of upper division English including English 117.

1A-1B. English Composition

BAGLEY, SMIT

The purpose of this course is to develop precision and directness in speaking and writing. A study of models, chosen from modern literature, forms the basis of class discussion and presentation. In 1A the emphasis is on exposition; in 1B on argumentation, description, and narration. Open only to students who have passed the English A examination.

Three units; throughout the year.

4. Great Books

OUTCA

A survey of books and bodies of literature that are primary sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic, Norse Edda, etc., and highly significant masterpieces in poetry and prose fiction. Lectures and required reading.

Two units; first semester.

50A-50B. The Drama

In this course typical works from the world's greatest dramatists are studied. The primary aim is a knowledge of the subject matter of the plays, with an attempt to lay bare the fundamentals of Dramatic Art. Characters are studied and motifs analyzed: The big significance of life as portrayed in the various plays is dwelt upon. The course includes the great Greek and Roman dramatists, selections from

rench and Spanish, German and Scandinavian, and others, as well as chief contemporary American and English dramatists.

Two units; throughout the year.

A-52B. Types of Literature

OUTCALT

Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems.

Three units; first semester.

Introduction to the study of dramatic poetry and prose, the essay, novel and short-story: elements, principles and characteristics; examples.

Three units; second semester.

A-56B. Survey of English Literature

BAGLEY

The aim of this course is to give the student a better acquaintance with great samples of English Literature which reveal the development of thought and social ideals from the Anglo-Saxon period to the middle of the nineteenth century. The work consists of readings in the masterpieces, class discussions, occasional quizzes, and written reports.

Three units; throughout the year.

Periodical Literature

OUTCALT

A study of current literature, in content and form, as presented by leading periodicals, with the purpose of promoting intelligence and discrimination in reading of immediate interest.

Two units; second semester.

C. Modern Prose Fiction

OUTCALT

A study of recent and contemporary fiction in drama, novel, and short-story, beginning with Meredith and including the best British and American fiction of our day.

Three units; second semester.

Shakespeare

OUTCALT

Extensive reading of Shakespeare's plays, with special attention to a selection of the comedies and another of the tragedies. Lectures and special reports.

Three units; first semester.

D. Browning and his Contemporaries

OUTCALT

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

Three units; second semester.

A-130B. American Literature

OUTCALT

A survey of American literature and its backgrounds from 1607 to the Civil War.

Three units; first semester.

Recent American literature, with its backgrounds, from the Civil War to the present time, giving special attention to the development of prose fiction in the novel, short story and drama.

Three units; second semester. (Not offered in 1926-27.)

FINE ARTS

Preparation for the major in Fine Arts—Art A, 1A-1B, 6A-6B, 12.
The major (junior year): Art 115A-115B.

E. Freehand Drawing and Sketching

BENTON, HUNTER

Freehand Drawing from objects and figure. Perspective, memory drawing and floor sketching. Mediums are charcoal, pencil, pen and ink and water color.

Two units; throughout the year.

Art History and Appreciation

HUNTER

A study of architecture, sculpture, painting and handicraft from the dawn of time to the Renaissance, through illustrated lectures, research and discussion. Prerequisite: 6A.

Two units; first semester.

1B. Art History and Appreciation

HUNTER

Same procedure as 1A but covering that period from the Renaissance to the Modern School. Prerequisite: 6A.

Two units; second semester.

6A-6B. Art Structure

HUNTER

Theory of design and color. Study of fine examples of painting and architecture, sculpture and handicrafts. The problems are intended to give a practical working knowledge of design and color.

Two units; throughout the year.

12A. Advanced Design

HUNTER

Problems in creative design and processes of application through batik, block printing etc. Prerequisite: 6A-6B.

Two units; first semester.

12B. Lettering and Posters

HUNTER

Design studied in relation to lettering, illumination and posters. Lettering for prearchitecture students included when desired. Prerequisite: 6A.

Two units; second semester.

52. Stage Design

BENTON

Theory of line, color and lighting for stage effects. Make-up and materials for stage use. Miniature stages are used for individual problems and the designing and making of costumes and settings for some College production is the final problem. History of the development of settings leading to the art direction of today. Prerequisite: 6A.

Three units; second semester.

94A. Costume Design

HUNTER

Design studied in relation to modern dress for general and individual type. The course includes study of foreign and historic influences on dress; original problems; sketching from costumes in the shops and demonstrations with models. Prerequisite: 6A.

Two units; first semester.

94B. History of Costume and Advanced Costume Design

HUNTER

This course is for students working towards special art or home economic certificates of secondary grade. Prerequisite: 94A.

Two units; second semester. (Not given in 1926-27.)

95A. Home Decoration

BENTON

Design in relation to the home. House planning and landscaping, interior decoration, study of period furnishing and furniture and their influence today through illustrated lectures, research and original problems. Prerequisite: 6A.

Three units; first semester.

95B—Takes up more intensive study of period styles and historic ornamentation. Original problems in designing furniture and fire places, and in selecting and combining textures. Prerequisite: 95A.

Two units; second semester. (Not offered in 1926-27.)

115A-115B. Life Drawing and Painting

BENTON, HUNTER

115A—Pose drawing from the figure.

115B—Illustration.

Prerequisite: Art A-B.

Two units; throughout the year. (Not offered in 1926-27.)

FOREIGN LANGUAGE

Preparation for a major in a Foreign Language. Required: 16 units of credit in the language chosen for the major. Recommended: History 4A-4B.
The major (junior year): A minimum of six units of upper division in the Foreign Language chosen for the major.

Elementary German

Pronunciation, reading and grammar, with practice in simple conversation, translation, and description, both oral and written.

Elementary German

Five units; first semester.

HEIMERS

Elementary German

Prerequisite: German A or two years of the high school course in German, or equivalent.

HEIMERS

Five units; second semester.

Intermediate and Scientific German

This course furnishes the regular preparation for the upper division courses.

Intermediate and Scientific German

HEIMERS

This course may be taken as a three-unit course in literature or as a five-unit course combining literature and science. Prerequisite: German B with a grade of C or three years of High School German.

Three or five units; first semester.

Intermediate and Scientific German

HEIMERS

Second semester; same as C. Prerequisite: German C with a grade of C or three years of High School German.

Three to five units; second semester.

Elementary French

Intensive study of French Grammar and Syntax; daily written work discussed in class; class drill in conversational idiom and pronunciation; reading with oral translation and résumés; dictation; introduction to contemporary prose writers; study of the principles of French Prosody, with memory work.

Elementary French

Five units; first semester.

HEIMERS

Elementary French

Prerequisite: French A or two years of the high school course in French, or its equivalent.

HEIMERS

Five units; second semester.

Intermediate French

Reading and composition; study of standard prose as a basis for class work; literal reading with résumés and written reports in French; study of French Prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences.

Intermediate French

HEIMERS

Prerequisite: French B or three years of the high school course in French, or its equivalent.

Three units; first semester.

Intermediate French

HEIMERS

Prerequisite: French C or four years of the high school course in French, or its equivalent.

102B. Introduction to French Classics

BROWN

Prerequisite: French D or its equivalent.

Three units; throughout the year. (Not offered in 1926-27.)

Elementary Spanish

Intensive study of Spanish grammar and Syntax, with daily written work; class drill in conversational idiom and pronunciation; reading with oral discussion and resúmenes; dictation; introduction to contemporary prose writers; study of the principles of Spanish Prosody, with memory work.

BROWN

A. Elementary Spanish

Five units; first semester.

BROWN

B. Elementary Spanish

Prerequisite: Spanish A or two years of the high school course in Spanish, or its equivalent.

Five units; second semester.

Intermediate Spanish

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; a study of Spanish Prosody, with selections for memorizing; dictation. Class work conducted mainly in Spanish. Individual conferences.

BROWN

C. Intermediate Spanish

Prerequisite: Spanish B or three years of the high school course in Spanish, or its equivalent.

Three units; first semester.

BROWN

D. Intermediate Spanish

Prerequisite: Spanish C or four years of the high school course in Spanish, or its equivalent.

Three units; second semester.

102A-102B. Introduction to Spanish Classics

BROWN

This course will introduce the student to the several types of classical literature. Reading will be: Gil Blas, and other novels of Roguery; one drama each from the works of Lope de Vega, Calderon, Alarcon, and Moreto; selections from Don Quixote, and the Cien Mejores Poesias Castellanes; collateral reading and reports.

Prerequisite: A grade of C in Spanish D or permission from the instructor.

Three units; throughout the year.

105A-105B. Modern Spanish Drama

BROWN

This course will trace the development of the drama of Spain from the beginning of the nineteenth century to the present time.

Prerequisite: Spanish D, or its equivalent.

Three units; throughout the year. (Not offered in 1926-1927.)

110A-110B. Novel and Short Story in Spain

BROWN

This course will trace the development of the novel and short story in Spain from 1830 to the present time.

Prerequisite: Spanish D, or its equivalent.

Three units; throughout the year. (Not offered in 1926-27.)

GEOGRAPHY

Preparation for the major in Geography: Geography 1, 2, and 4.

The major (junior year): a minimum of six units of upper division work in Geography.

Introduction to Geography: Elements

CL

This course deals with the fundamental principles of Geography, with the distribution of life upon the earth and with the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and location related to human activities. Open to all students.

Geography 1, three units; either semester.

Geography 1A, two units; either semester.

Introduction to Geography: Natural Regions and the Distribution of Population and of Cultures CLARK

This course applies the fundamental principles of Geography to the various regions of the world. The regions are compared with regard to different stages of development. Prerequisite: Geography 1 or Geography 1A.

Geography 2, three units; second semester.

Geography 2A, two units; either semester.

Elementary Meteorology

A study of the earth's atmosphere and the changes in it which produce our weather and influence human affairs.

Three units; first semester. (Not offered in 1926-27.)

Map and Instrument Study of Weather and Climate

The making and recording of meteorological observations; practical work with meteorological instruments and a study of weather and weather maps.

Two units; second semester. (Not offered in 1926-27.)

Europe

CLARK

This course deals with the physical environment of each of the nations and their reactions to physical environment in their political and social relations. It is planned so as to be of value to all students who wish to familiarize themselves sufficiently with modern Europe to be able to read current periodical literature with interest and understanding. The course introduces the students to the smaller as well as the larger of the European countries.

Three units; first semester.

South America

CLARK

This course deals with the climate, topography and natural resources of the South American countries, and with the effect of those physical factors upon the economic, commercial and racial problems of the different nations.

Three units.

Europe—Advanced

CLARK

This course follows Geography 17 or its equivalent and stresses the economic problems of the European countries. Special stress is laid on those countries which occupy, at present, the more important places in the world's affairs.

Three units; second semester.

Introduction to Economic Geography

CLARK

This course includes a study of the economic activities of nations and peoples as influenced by geographical factors, with a study of present-day problems in the field of the subject. Required for special certification for teaching the commercial subjects in the junior high schools.

Three units; one semester. (Not offered in 1926-27.)

Physical Geography 2

This is an elementary course dealing with the earth's surface features and the geologic laws governing their origin and development. Principles underlying the evolution of topography under different climatic conditions, and the origin and nature of certain types of natural scenery, will be stressed.

Three units; first semester.

General Geology 1A

This course deals with the history and processes of the formation of the earth.

Three units; second semester.

HISTORY

Preparation for the major in History: History 4A-4B or History 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2.

Students who have not had at least two years of European history in the high school must take History 4A-4B.

The major (junior year): A minimum of six units of upper division work in history.

4A-4B. History of Modern Europe

POTT

The growth of western European civilization from about 1500 A.D. to the present time. An introduction to the study of History, affording a general perspective of the development of society, politics and institutions in Europe. The first half-year's work extends to the Congress of Vienna. A textbook and syllabus are used. Two lectures and one quiz section each week.

Three units; throughout the year.

8A-8B. History of the Americas

POTT

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis is placed on the planting of European civilization in the western hemisphere, the growth of the colonies of various nations, the international contest for the continents, the wars of independence in English-America and Hispanic-America, the development of American republics, and their relations with each other and with the rest of the world. This course is based on Bolton, *Syllabus of the History of the Americas*. Two lectures and one quiz section each week.

Three units; throughout the year.

122. Medieval Culture

An intensive study of the development of thought from 500 A.D. to about 1300 A.D., with special emphasis upon the twelfth and thirteenth centuries. The course will be based on Pactow, *Guide to the Study of Medieval History*, part I. Open only to upper division students.

Three units; first semester.

172. History of the United States Since 1865

A survey of the recent political, social and economic development of the United States, with emphasis upon the American participation in the World War. Open only to upper division students.

Three units; second semester.

HOME ECONOMICS

HOUSEHOLD ART

Preparation for the major in Household Art required: High school courses in Botany and Chemistry or equivalents; Household Art 1A-1B; Art 6A-6B; History 4A-4B or equivalents. Recommended: Economics 1A-1B, Art 12, Psychology 2A-2B, French or German; high school courses in Clothing, Freehand and Mechanical Drawing. History 4A-4B is not required of students who present credit for three years of high school History.

1A. Clothing

LAND

A study of clothing problems. The hygiene, artistic and economic aspects of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: One year of high school Sewing or equivalent, Art 6A. Art 6A may be taken concurrently with this course.

Three units; first semester.

1B. Clothing and Costume Design, Textiles

LAND

A study of costume design with lectures on artistic appreciation, color and materials. Textile study includes a survey of textile fabrics, chemical and physical tests. Application of principles to the selection and construction of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: Clothing 1A, or equivalent, high school Chemistry or Chemistry 1A, Art 6B. Art 6B may be taken concurrently with this course.

Three units; second semester.

2A. Home Making

COLDV

A general view of the place of the home in society. Administration of the household. Budgeting of incomes to cover shelter, food, clothing, savings and social life. Field work, assigned reading and theme writing required. Lectures, discussion, recitations.

Two units; either semester.

B. Home Accounting

COLDWELL

Basic principles of administering household finances. Budgeting the moderate income; keeping accounts; banking methods; home management. Saving and investing.

Two units; second semester.

Millinery

LANDERS

Making of hats, frames, trimmings, etc. Application of principle of design. Prerequisite: Art 6A. Art 6A may be taken concurrently with this course. Recommended: Art 6B.

Two units; first semester.

HOUSEHOLD SCIENCE

Preparation for the major in Household Science: Household Science 1A-1B, Chemistry 1A-1B, 8, Bacteriology 1.

A. Food Economics

LANDERS

Principles of selecting and preparing foods. A study of composition, production, preservation, nutrition value, digestibility, flavor and cost of foods. One lecture or recitation and two laboratory periods per week. Prerequisites: One year of high school Cooking or equivalent, Chemistry 1A. Chemistry 1A may be taken concurrently with this course.

Three units; first semester.

B. Food Economics

LANDERS

Principles of diet applied to individual family and special group. The planning and serving of meals. One lecture or recitation and two laboratory periods per week. Prerequisites: Food Economics 1A or one year of high school Cooking, high school Chemistry or Chemistry 1A.

Three units; second semester.

Dietetics

LANDERS

An analysis of food with special reference to needs of special group. Prerequisites: Food Economics 1A-1B, Chemistry 1A-1B, Organic Chemistry 8 (to be taken concurrently with this course), Bacteriology 1.

Two units; second semester.

HYGIENE

Hygiene and First Aid

C. E. PETERSON

An informational course in personal and community Hygiene required of all men the freshman year taking work in the Liberal Arts curricula. The course includes study of Sex Hygiene and of the Hygienic Principles of Exercise, Bathing and Sleep. Civic Hygiene is vitalized through investigations by each student of special topics, the means by which the health of the local community is protected and improved, providing subjects for special study. Lectures, reference reading, special topics, discussions, oral and written quiz.

One unit; either semester.

Hygiene and First Aid

TANNER

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social Hygiene is studied in its relation to the practical problems of young women and prospective home makers. The means and procedure in local civic health matters of particular interest to women are studied in detail. Reports following personal investigation of at least three major topics are required for each member, these reports being given and discussed before class. Required of all women in the freshman year taking work in the Liberal Arts curricula.

Two units; either semester.

JOURNALISM

News Gathering and Reporting

F. L. SMITH

Study of news sources and practice in news writing. Newspaper organization. Three units; first semester.

51B. News Editing and Correspondence

F. L. SMITH

Practice in copy-reading. Study of news values and types of newspaper stories. Three units; second semester.

MATHEMATICS

Preparation for the major in Mathematics, required: Mathematics 3A-3B and 4A-4B. Recommended: Physics 2A-2B or 1A-1B and a reading knowledge of French and German.

A. Algebra

Course A is substantially the equivalent of the high school course in Algebraic Theory. It includes: A brief review of the fundamental operations, factoring, powers and roots, logarithms, graphs, solution of equations, the binomial theorem, progressions, permutations and combinations. Prerequisites: Elementary Algebra and Geometry.

Three units; first semester.

C. Trigonometry

Course C includes the usual high school course in Trigonometry but gives more attention to trigonometric identities and equations. The usual trigonometric formulae are developed and used in the solution of triangles. Logarithmic computation is explained and used. Prerequisite: Mathematics A or its equivalent.

Three units; second semester.

1A-1B. General Course

LIVINGSTON

The course begins with the solution of simple problems by graphical methods then by the more exact methods of differential and integral calculus. The work in calculus is later extended to problems in Trigonometry and Analytic Geometry, the essentials of these subjects being presented as needed. Incidentally there is an adequate treatment of the topics usually presented in advanced high school Algebra. This course should give at least a general view of those processes in Mathematics which are so necessary to the solution of problems in the exact sciences and which are proving a valuable aid to students of Social Science and Business Administration. It is intended primarily for nonengineering students. Prerequisites: Elementary Algebra and Geometry.

Three units; throughout the year.

2. Mathematics of Investment

WRIGHT

Interest and annuities; amortization; sinking funds; valuation of bonds; depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Mathematics A and C or their equivalents, or Mathematics 1A-1B.

Three units; second semester.

Elements of Analysis, with Applications

A two-year course in Algebra, Analytic Geometry, and Calculus, intended primarily for students in Engineering and Chemistry.

3A-3B. Plane Analytic Geometry and Differential Calculus

LIVINGSTON

Prerequisites: Mathematics A and C or their equivalents.

Three units; throughout the year.

4A-4B. Solid Analytic Geometry and Integral Calculus

LIVINGSTON

Prerequisite: Mathematics 3A-3B or its equivalent. The high school course in Solid Geometry is also strongly recommended.

Three units; throughout the year.

6. Projective Geometry

LIVINGSTON

The course includes the construction and study of conic sections and certain other curves, by means of perspectives, poles and polars, involutions and inversion. Prerequisites: Elementary Algebra and Plane Geometry.

Three units; second semester.

MUSIC

The primary aims of the various music organizations are to give the students participating, and incidentally the entire college student body listening, an added opportunity for and knowledge of the best in Choral and Orchestral Music. Added to this are the cultural advantages to be gained, the ability to read and produce good music, the mind training in the necessary concentrating upon the wishes of a conductor, the noise which comes with appearing before public audiences, the promotion of college spirit, the enriching of student and college activities, and the great pleasure and nobling effect of artistic expression through music.

A, B, C, or D. Treble Clef Club L. D. SMITH
One-half unit; either semester.

A, B, C, or D. Male Chorus L. D. SMITH
One-half unit; either semester.

A, B, C, or D. Choral Club L. D. SMITH
One-half unit; either semester.

A, B, C, or D. Orchestra NASHOLD
One unit; either semester.

History and Appreciation of Music L. D. SMITH
Development of primitive systems; mediaeval music; the school of counterpoint; history of oratorio and opera; the rise of classic forms. A study of the works of the composers of the classic and romantic periods. Illustrations, lectures and reports.
Three units; second semester.

A-4B. Harmony L. D. SMITH
Scale construction, intervals, chords, structure, modulation, through various types of seventh chord. Especial attention is paid to the keyboard application of problems in harmonization, transposition, and modulation.
Three units; throughout the year.

PHYSICAL EDUCATION

Preparation for the major in Physical Education, required: High school Chemistry, Biology 10A-10B, Physiology 1, Bacteriology 1, Economics 1A-1B, Psychology 1A-2B. Recommended: German or French, Public Speaking 1A-1B.

Physical Education for Men C. E. PETERSON

A two-hour course required for the two years of Junior College work. Physical examination is given each student when entering and special attention is given to correcting postural faults. In addition to the body building work given in the class periods, physical efficiency tests embracing agility, defense and swimming are given each semester. During the two years a playing knowledge of the major and minor sports is given and fundamentals of boxing and wrestling taught each student.

1A, B, C or D. Physical Education. One-half unit; throughout the year.

13A or B. American Football. One-half unit; first semester.

3A or B. Track. One-half unit; second semester.

4A. Baseball. One-half unit; second semester.

5A or B. Basketball. One-half unit; second semester.

6A or B. Tennis. One-half unit; either semester.

7A or B. Boxing. One-half unit; either semester.

8A or B. Wrestling. One-half unit; either semester.

10A, B, C or D. Swimming. One-half unit; either semester.

Physical Education for Women TANNER, RAW

Students are given a health and physical examination, the physical activities prescribed being based upon the data thus obtained. Two hours weekly of directed physical Training are required of all women students, the chief purpose being to develop a knowledge of and interest in suitable sports and games, that habits of vigorous exercises may be promoted.

Intra-mural sports are encouraged, particularly those of inter-class nature.

52A-52B. Physical Education

Prescribed courses for freshmen.

One-half unit; throughout the year.

52C-52D. Physical Education

Prescribed courses for sophomores.

One-half unit; throughout the year.

101. First Aid and Bandaging

C. E. PETERSON

Proper care of injuries received on the playground and athletic field. Methods of bandaging and first principles of massage used in athletic training.

One unit; first semester.

PHYSICS

Preparation for a major in Physics, required: Physics 2A-2B and 3A-3B, with a grade of B, or Physics 1A-1B and 1C-1D; Chemistry 1A-1B; Mathematics C, 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

1A-1B. General Physics

BAIRD

Mechanics, properties of matter, and heat. This course aims at a development of the fundamental ideas which underlie the subject of Physics, and the application of them in the discussion of practical problems. The work is presented in lectures, text assignments, problem sets and experimental laboratory work. Two lectures and one laboratory period each week. Prerequisites: Physics 2A-2B and 3A-3B or high school Physics; three years of high school Mathematics, including Trigonometry.

Three units; throughout the year.

1C-1D. General Physics

BAIRD

This course is a continuation of Physics 1A-1B for students in the sophomore year, and includes magnetism, electricity, sound and light. Two lectures and one laboratory period each week.

Three units; throughout the year.

2A-2B. General Physics

GILKE

Properties of matter, mechanics, heat, sound, light, electricity and magnetism. A non-engineering course. Lectures, demonstrations and discussions. Prerequisite: High school advanced Algebra or high school Physics, or equivalents.

Three units; throughout the year.

3A-3B. Physical Measurements

BAIRD

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity and magnetism. These exercises are usually taken in conjunction with Physics 2A-2B.

One unit; throughout the year.

PHYSIOLOGY

Preparation for the major in Physiology, required: Zoology 1A-1B or Physiology 1, Physics 2A-2B and 3A-3B, Chemistry 1A-1B and 8-9. Recommended: German and French.

1. Introductory Human Physiology

The structure and functions of the human body, to give a general conception of the relationship of the human body to its environment. Three lectures or recitations, two laboratory periods per week. Prerequisite: At least one of the following: Zoology 1A-1B, Biology 10A-10B. Chemistry 1A-1B or 2A-2B and 3A-3B.

Five units; first semester. (Not offered in 1926-27.)

POLITICAL SCIENCE

Preparation for the major in Political Science, Political Science 1A-1B and Economics 1A-1B or History 4A-4B or Geography. High school Civics is presupposed in the following courses.

A. Comparative Government

POTTER

The government and parties of Great Britain and her self-governing dominions, France, of Belgium, and of Italy.

Three units; first semester.

B. Comparative Government

POTTER

The governments of Germany, Switzerland, Russia, Japan, and the United States.

Three units; second semester.

C. Constitution of the United States

This course is planned to meet the requirements of the state law for the certification of teachers. The origins, principles and development of the Constitution.

Two units; one semester.

PSYCHOLOGY

Preparation for the major in Psychology, required: Psychology 2A and 2B, Psychology 1A-1B, or Biology 10A-10B. Recommended: French, German, Chemistry, Physics, Physiology 1.

1. General Psychology

BELL

A study of the modern scientific interpretation of the facts of consciousness: their relation to each other, to their external stimuli, and to the nervous system.

The aim is (1) to increase the student's understanding of himself and to contribute to his intelligent, discriminating reading of current popular and scientific literature; and (2) to give a definite and necessary basis for advanced work in psychology.

Three units; first semester.

2. Applied Psychology

BELL

A general survey of the results of modern Psychology applied to self-improvement, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in these fields between scientific, legitimate Psychology and the Pseudo-Psychology that is popular because of its simplicity and plausibility or because of its mysticism.

Three units; second semester.

3. Genetic Psychology—Growth and Development of the Child

JOHNSON, BELL

A study of the mental and physical growth and development of the child. Special emphasis is given to norms of structure and function as a basis for an interpretation of variations from them. Behavior problems and the growth of personality traits and conditioning factors of physical and mental hygiene are also treated.

Three units; second semester.

4. Social Psychology

W. JOHNSON

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, the crowd, public opinion, social control, etc. Prerequisite: Psychology 2A.

Three units; second semester.

PUBLIC SPEAKING

Preparation for the major in Public Speaking: Public Speaking 1A-1B or English 1A-1B, Public Speaking 2A, 5A.

1. Elements of Public Speaking

LANE

Training in fundamental processes; organization and arrangement of material; outlining; practice in the construction and delivery of type forms of speech.

Three units; throughout the year.

2A. Elements of Expression and Interpretation

LAN

A study of the laws governing correct voice production. The essentials of effective oral interpretation. Practice in reading and speaking.

Three units; first semester.

5A. Argumentation and Debate

LAN

A study of the preparation of the proposition, analysis, brief drawing, selection of evidence, kinds of argument, and fallacies; and the presentation of speeches on topics of current interest.

Three units; second semester.

55A-55B. Drama Production

JONE

Practical training in selecting, casting, rehearsing, staging, costuming, and directing plays. The workshop method is used, together with lectures and collateral readings on the technique and history of dramatic production. Public presentations are given of plays worked out in class.

Three units; throughout the year.

ZOOLOGY

Preparation for a major in Zoology required: Zoology 1A-1B and high school Chemistry or Chemistry 1A. Recommended: French, German and Botany 2A-2B.

1A. Zoology

JOHNS

An introduction to animal Biology dealing with structure, functions and evolution of animal life. The laboratory work supplements the lectures and is based on the study and observation of living and preserved material. The course will acquaint the student with the fundamental facts and theories of Biology as they pertain to animal life. It is valuable to the general student as well as to the Biology specialist. Three lectures or recitations and two three-hour laboratory periods per week.

Five units; first semester.

1B. Zoology

JOHNS

A continuation of 1A. The first half of the semester is given to the study of the structure and behavior of the chordates, with a detailed dissection and study of the shark. The second half is devoted to the study of the early development of the various types of animals, especially the chick. The course deals with the high animals, the vertebrates, thus supplementing the work of the first semester. The detailed dissection of the shark and the careful study of the developing chick give the student a good basis for further work in medicine, agriculture, or zoology, and furnish as well a good biological background for students in any line of work. The lectures or recitations and two three-hour laboratory periods per week.

Five units; second semester.

10A-10B. Biology

JOHNS

The fundamentals of plant and animal Biology, with elementary work on heredity, evolution and eugenics. The laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic facts of Biology. It is designed not only to give the general student an acquaintance with living things and their relationships but also to furnish the prospective teacher with an adequate background for natural study teaching. Two lectures or recitations and one three-hour laboratory period per week.

Three units; throughout the year.

101. Seashore Biology

JOHNS

Illustrated lectures deal with the more common animals that are to be found on nearby beaches. The life history, habits, and distribution of our more conspicuous shore animals are considered. Students will have the opportunity to get acquainted with the living animals both at the beach and in the laboratory. This course may be taken alone or concurrently with 10A-10B. One hour lecture per week and trips to the beach as opportunity offers.

One unit; one semester.

Heredity and Evolution

A discussion of the facts of heredity, in plants, animals and man; the Mendelian and its application; development of theories of evolution. Reports on assigned s are required. The course is designed to make the student familiar with some e current literature and opinions of scientists concerning heredity and evolution. prerequisites: Biology 10A-10B or Zoology 1A-1B or Botany 2A-2B.

Three units; first semester. (Not offered in 1926-27.)

Eugenics

A study of Human Heredity and Eugenics. Assigned readings and reports. The of the course is to acquaint the student with current literature on the subjects of nics, including investigations that have contributed data on the subject. Pre-site: Heredity and Evolution 114.

Two units; second semester. (Not offered 1926-27.)

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San Diego State College

BULLETIN

Announcement of Courses

1927-1928



June, 1927

CALIFORNIA STATE PRINTING OFFICE
CHARLES A. WHITMORE, State Printer
SACRAMENTO, 1927

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

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The Educational Quarterly Bulletin

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Volume Fifteen

JUNE, 1927

No. 2

ANNOUNCEMENT OF

Courses of Instruction

OFFERED IN

Education, Teacher Training, Arts,
Literature, Science, Commerce,
Social Service

1927-1928

*Published Quarterly by the State Teachers College of San Diego,
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DEPARTMENTAL ORGANIZATION.

Anthropology -----	<i>E. L. Hewett</i>
Agriculture and Nature Study -----	<i>W. T. Skilling</i>
Botany -----	<i>G. V. Coy</i>
Chemistry -----	<i>L. F. Pierce</i>
Economics -----	<i>A. G. Peterson</i>
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Psychology -----	<i>G. S. Bell</i>
Zoology -----	<i>M. E. Johnson</i>

FACULTY.

- EDWARD L. HARDY**, President. School Administration. B.L., University of Wisconsin; M.A., University of Chicago; Study of European secondary schools, 1898-1899; Principal San Diego High School, 1906-1910. (Appointed September 1, 1910.)
- IRVING E. OUTCAULT**, Vice President and Professor of English. Student, University of Illinois, 1888-1891; A.B., Stanford University, 1896; M.A., Stanford University, 1897; graduate student, Stanford University, 1897-1898; Head Department of English, San Diego High School, 1907-1912; travel in Europe, 1910-1911; research work, Stanford University, 1921-1922. (Appointed September 1, 1912.)
- ARTHUR G. PETERSON**, Dean of Liberal Arts, ex officio in general charge of lower division studies and Dean of Men. Economics and Sociology. A.B., College of the Pacific; M.A., Stanford University; Vice Principal San Diego High School and Director of Junior College, 1919, 1920, 1921. (Appointed September 1, 1921.)
- VILLIS E. JOHNSON**, Dean of Department of Education. Professor of Education. Graduate of State Normal School, St. Cloud, Minnesota; Ph.B., A.M., Illinois Wesleyan University; A.B., A.M., Ph.D., University of Minnesota; Sc.D., South Dakota State College; LL.D., Dakota Wesleyan University. Taught in rural, village and city schools, state normal school and university. President of State normal schools at Ellendale, North Dakota, and Aberdeen, South Dakota, and of South Dakota State College, Brookings. Member of staffs of the educational surveys of Virginia and Alabama. (Appointed April 1, 1924.)
- MRS. ADA HUGHES COLDWELL**, Dean of Women, Head Home Economics Department. Student Hopkins Art School, San Francisco; Special Study in Europe; Grade Teacher, Alameda, California, six years; Student California Medical College, San Francisco; Licensed Pharmacist, State of California; Special Study, Columbia University; Head of Home Economics Department, University of Montana, Summer Session, 1915. (Appointed Head of Home Economics Department September, 1907; Appointed Dean of Women June, 1915.)
- GEORGIA C. AMSDEN**, Commerce. Gregg School, Chicago; special secretarial training in various institutions; University of California summer sessions and extension division work; teacher in University of California summer school, 1918; traveling representative and secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant editor and reporter, Ypsilanti, Michigan, Daily Press; Instructor, San Diego High School, 1909-1924. (Appointed September 1, 1925.)
- VIVIAN M. ARNERICH**, Assistant, Training School. A.B., State Teachers College, San Jose; professional study, Stanford University; Teacher, San Jose public schools two and one-half years. (Appointed September, 1926.)
- W. AULT**, Principal of the Training School and Assistant Professor of Education. Undergraduate work at Miami University and Valparaiso University, B.S. Graduate work at the University of Iowa and the University of South Dakota, M.A. Superintendent of city schools twelve years; conductor and instructor in teachers institutes; professor of Education at Southern State Teachers College, Springfield, South Dakota, 1922-1924. (Appointed September 1, 1925.)
- ARTHUR G. BAGLEY**, Assistant Professor of English. A.B., University of Michigan; A.M., University of California; graduate study, University of Illinois and Columbia University; Head Department of English, State Normal School, Oshkosh, Wisconsin; Instructor, San Diego Junior College, 1919-1921. (Appointed September 1, 1921.)
- W. BAIRD**, Assistant Professor of Physics. A.B., University of Wisconsin; M.A., University of California; Instructor in Physics, University of Washington, one year; Head Department of Science, Tacoma High School, six years. (Appointed September 1, 1921.)
- MRS. GERTRUDE SUMPTION BELL**, Associate Professor of Education. Tests and Measurements. A.B., Indiana University; M.A., Stanford University; graduate Indiana State Normal School; research work, Clark University; Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; instructor, School of Education, Indiana University. (Appointed August 1, 1916.)

- MARY BENTON, Assistant Professor of Art. Student at Rosemont Dezailey, Lausanne, Switzerland; at Chicago Art Institute; at New York School of Art; at Teachers College, Columbia University; pupil of W. J. Whitemore, miniature painter, and of Sara Butterworth, craftsman. (Appointed July 1, 1916.)
- ELIZABETH MCPIKE BROWN, Assistant Professor of French. Ph.B., M.A., Ph.D., University of Chicago; Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France; Certificat d'Etudes Françaises, University of Paris. Assistant in French, University of Chicago, 1918-1920; summer quarter, 1922; Head of French Department, Rockford College, Rockford, Illinois; Instructor in University of California, Extension Division, San Diego. (Appointed September 1, 1926.)
- LESLIE P. BROWN, Associate Professor of French. A.B., Yale University; M.A., Harvard University. Instructor in French and Spanish, Northwestern University, 1913-1915; Instructor in Harvard University, 1916-1917; Instructor in University of North Carolina, 1917-1918; Instructor in University of Chicago, 1918-1922. (Appointed July 1, 1922.)
- VINNIE B. CLARK, Assistant Professor of Geography. A.B., University of Wisconsin. Graduate student, University of Chicago; Assistant in Geography, University of Wisconsin; Oak Park, Ill., High School, 1913-1914; travel in Mexico and graduate study, University of Mexico, 1922; Summer Session Instructor, University of California, Southern Branch, 1923; Travel in Europe, 1924. (Appointed September 1, 1914.)
- KATHERINE E. CORBETT, Training Supervisor and Assistant Professor of Education. B.Pd., Michigan State College; B.S. and A.M., Teachers College, Columbia University; graduate Public School Music course, Ypsilanti Conservatory of Music; Teacher in Public Schools, Ypsilanti; special teacher in Americanization courses; Training Supervisor, Kent State Normal College, Ohio. (Appointed July 1, 1921.)
- GEORGIA V. COY, Professor of Botany. Graduate San Diego Normal School; Teacher in San Diego County Schools, 1909-1910; B.S., Columbia University; M.S. Ph.D., University of Chicago; Bachelor's Teaching Diploma in Biology, Teachers College, Columbia University; graduate work at University of California, 1915 (Appointed September 1, 1912.)
- ALMYRA DAWSON, Assistant, Training School. A.B., San Diego State Teachers College. (Appointed September, 1925.)
- LESLIE S. EVERTS, Accounting. B. L., University of Wisconsin; C. P. A., California Wisconsin; Public Accountant in Milwaukee, Wisconsin, and San Diego California, 1909. (Appointed September 1, 1921.)
- WALDO H. FERGASON, Biology. B.A., St. Olaf College, Northfield, Minnesota, 1924 Teaching Fellow, 1923-1924; Diploma St. Olaf School of Music, 1925; Instructor in Music, Roosevelt Junior High School, San Diego, 1925-1926; graduate study, University of Southern California, summers of 1925 and 1926. (Appointed September 1, 1926.)
- WALLACE A. GILKEY, Instructor in Physical Science. A.B. and C.E. (Chemical Engineer) at Stanford University. Graduate student, Stanford University. Instructor at Seale Military Academy, spring of 1922. Employed two years in chemical engineering with the Santa Cruz Portland Cement Company in the Cottrell Precipitation Plant; the American Smelting and Refining Company a laboratory chemist; and the Refinery of Standard Oil Company at El Segundo California, as chemical engineer and petroleum inspector. (Appointed September 1, 1925.)
- EDITH C. HAMMACK, Training Supervisor and Assistant Professor of Education. Graduate State Normal School of San Diego; B.A., State Teachers College of San Jose; professional study at University of California; Public School Teacher five years. (Appointed February 1, 1911.)
- MRS. ALICE LILI HELMERS, German. Student at Universities of Bonn, Lausanne, Berlin (Ph.D. Berlin). Postgraduate work at University of Chicago and Columbia University. Head of Department of Modern Languages, State Normal School, Indiana, Pa.; Assistant Professor of Modern Languages, St. Lawrence University, N. Y.; Supervisor of Foreign Language Press in the United States during the World War. Assistant Editor of "Foreign Born." (Appointed September 1, 1924.)
- EDGAR L. HEWETT, Professor of Anthropology. D.Sc., University of Geneva, Switzerland; Director, School of American Research of the Archeological Institute of America; Director, San Diego Museum. (Appointed September 1, 1922.)

ETLE ELIZABETH JOHNSON, Professor of Biology. B.S., M.S., Ph.D., University of California; Research Assistant, Scripps Biological Institute, La Jolla, California; Instructor, Pasadena High School, 1912-1921. (Appointed September, 1921.)

EL ELIZA JONES, Drama Production. B.L., M.L., University of California. Director Junior Players of Pasadena Community Playhouse; Drama Instructor in Chouinard Art School, Los Angeles; Organizing Secretary and Instructor in Play Writing of Summer Art Colony at Pasadena Community Playhouse; Drama Organizer and Director of San Diego Community Service. (Appointed September 1, 1925.)

JORIE E. LANDERS, Assistant Professor of Home Economics. A.B., Stanford University; Special Certificate Home Economics, Santa Barbara State Teachers College; Head Department Home Economics, San Juan Union High School; Assistant Dietitian, Fabiola Hospital, Oakland, California, 1918; Home Economics, McKinley High School, Honolulu, T. H.; Kern County Union High School, Bakerfield, California. (Appointed September 1, 1924.)

LES B. LEONARD, Associate Professor of History. A.B., M.A., University of California; graduate study, three years at University of California; Instructor in History, Lowell High School, San Francisco. Teaching Fellow in History, University of California, 1924-1926. (Appointed September 1, 1921.)

IS B. LESLEY, Assistant Professor of History. A.B., Stanford University; M.A., University of California; Instructor, Principia School, St. Louis, Mo., 1920-1921; Teaching Fellow in History, University of California, 1922-1923; Native Sons' Traveling Fellow in Europe from University of California, 1923-1924; Acting Assistant Professor of American History, Pomona College, 1925-1926. (Appointed September 1, 1924.)

GE R. LIVINGSTON, Assistant Professor of Mathematics. B.S., M.A., University of California; Instructor, San Diego Junior College, 1914-1918; Head of Department of Mathematics, Santa Barbara Junior College, 1919-1921. (Appointed September 1, 1921.)

IAM L. NIDA, Associate Professor of Education, Supervisor of Public School Practice and Appointment Secretary. Ph.B., Ohio State University; graduate student, University of Chicago; M.A., University of Southern California; Principal of Ohio High Schools, nine years; Superintendent of Schools, seven years, Illinois; Supervisor Junior High Schools, San Diego, California, two years. (Appointed July 1, 1921.)

LES E. PETERSON, Director of Physical Education for Men. Student at Oregon Agricultural College, the University of California and the State Normal School, San Diego; student two years under Robert Krohn; Director of Playgrounds, M. C. A. Physical Education, Physical Education and Recreation in United States Army camps; Berkeley School System. (Appointed July 1, 1921.)

FRANCIS PIERCE, Professor of Chemistry. B.S., Grinnell College; M.Sc., Tulane University; Ph.D., Stanford University; Research Assistant and Instructor, University of Idaho; Professor of Chemistry, Washburn College; Instructor and graduate student, Tulane University; University Fellowship, Stanford University. (Appointed September 1, 1923.)

LOUISE RANKIN*, Fine Arts. A.B., University of California. Student at San Diego State College and Colorado Springs Academy of Fine Arts. (Appointed September 1, 1926.)

M. RAW, Physical Education. A.B., University of Southern California; Student Teacher in Physical Education, Polytechnic High School and University High School, Los Angeles; graduate student, University of Southern California, summer sessions 1924-1925; foreign travel, 1926. (Appointed September 1, 1923.)

M. RICHARDS, Training Supervisor and Assistant Professor of Education. S., and A.M., University of Missouri; graduate student, University of Southern California; Rural School, City School and High School Teacher; City Superintendent of Schools, six years; Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College, two years. (Appointed September 1, 1921.)

leave of absence, 1927-1928.

CHARLES R. SCUDDER, Industrial Arts. Preparation at University of Illinois; Teacher of Industrial Work at Grand Rapids, Michigan; Director of Industrial Arts, Evanston, Illinois; Director of Industrial Arts at Washington State Normal School at Bellingham. (Appointed September 1, 1918.)

W. T. SKILLING, Associate Professor of Agriculture and Nature Study, State Normal School, Los Angeles; Teacher in Los Angeles county and city public schools five years; student at Stanford University one year; B.S., M. S., University of California; Assistant in Physics, University of California, 1899-1901. (Appointed September, 1901.)

FLORENCE L. SMITH, Assistant Professor of English. A.B., Northwestern University; M.A., University of Chicago; Instructor, State Normal School at Oshkosh, Wisconsin. (Appointed July 1, 1917.)

LEILA D. SMITH, Assistant Professor of Music. Mus. B., A.B., Oberlin College formerly Head of Department of Music, State Teachers College, Winona Minnesota. (Appointed September 1, 1922.)

MARIAN PEEK SMOOR,* Training Supervisor and Assistant Professor of Education A.B. and A.M., Stanford University; Teacher in Public Schools; Assistant in History, Stanford University; Dean of Women, State Normal School, Chene, Washington; Francis W. Parker School, San Diego, California. (Appointed September 1, 1923.)

WILL J. STANTON, Commercial Law. LL.B., University of Michigan; graduate study, University of Michigan; editor legal journal, fourteen years; Prosecuting Attorney, Michigan and California; Instructor, San Diego High School and Junior College. (Appointed September 1, 1921.)

S. LAVENDER STOVALL, Assistant Professor of Engineering. Student University Texas, 1895-1896, 1897-1898; B.S., in Electrical Engineering, University California, 1924. Five years with the General Electric Company, research and design of apparatus; five years Chief Engineer of Mt. Whitney Power and Electric Company; three years on Irrigation Engineering; four years Efficient Engineer in the oil fields of California. (Appointed September 1, 1924.)

ALVENA SUHL, Assistant in Geography. A.B., University of California; Teaching Fellow and graduate student two years, University of California; teacher public schools two years. (Appointed September 1, 1926.)

JESSIE RAND TANNER, Assistant Professor of Physical Education. Graduate Boston Normal School of Gymnastics; B.S., Columbia University; Bachelor Teaching Diploma, Teachers College, Columbia University; tutor, Brookline Massachusetts; Graduate Student, University of California, 1925. (Appointed July, 1904.)

FRANKLIN D. WALKER, Public Speaking and English. University of Arizona Holder of Arizona Rhodes Scholarship to Oxford, 1920-1923. B.A. (Hon.), University of Oxford. Graduate Student, University of California; Instructor in Dramatics, Francis W. Parker School, San Diego, California 1924-1926. (Appointed September 1, 1926.)

W. H. WRIGHT, Commerce. B.S., University of California; graduate study, year, University of California; Head Department of Commerce, Union High School, Visalia, California, 1917-1921. (Appointed September 1, 1921.)

Special Lecturers in Art.

REGINALD POLAND, M.A., Director of Fine Arts Gallery of San Diego.

RALPH MORRIS, B.A., Assistant Director of Fine Arts Gallery of San Diego.

Assistant Instructors.

DOROTHY R. HARVEY, Biology. A.B., San Diego State College; graduate work Biology at Scripps Biological Institute, La Jolla; at the University of California and at the University of Southern California; public school teaching years. (Appointed September 1, 1924.)

GENEVIEVE KELLY, Sociology. A.B., University of California; A.M., Columbia University; Los Angeles Public Library School one year; teacher at Core Union High School; Librarian at Northern Arizona Normal School, Flagstaff; Librarian at Scripps Foundation for Research in Population Problems, Oxford, Ohio. (Appointed September 1, 1924.)

*On leave of absence, Fall semester, 1926-1927.

Teaching Fellowship.

EDITH MILLS SCOTT, Training School.

Assistants in Physical Education.

M. G. BRUCKER, Freshman Football, Basketball and Baseball.

J. DOUGLAS, Football.

THOMAS McMULLEN, Basketball.

LEE WAYMIRE, Baseball.

Student Assistants.

ELEN BANKERD, History.

MARCISSA DELANO, Training School Office.

W. DE SILVA, Industrial Arts.

DONA HANIGAN, Training School Office.

EDITH HANIGAN, Training School Office.

EDITH HARRISON, Registrar's Office.

J. KNEIP, Chemistry.

MARY MAULL, Education.

WINNIE L. MAW, Secretary's Office.

E. MILBERY, Chemistry Storekeeper.

E. MONROE, Chemistry.

ELSIE MORIARTY, Fine Arts.

THOMAS NEWMAN, Physics.

WILLIAM M. RYAN, Tests and Measurements.

MARGARET WHELAN, Physics.

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the legislature, later approved by the Governor of the state and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) have been offered, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service in the new three- and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the degree A.B. (major in Education) were established for this institution June 30, 1923.

On and after July 1, 1927, the courses hitherto carried as "junior college" courses, will be offered as lower division courses of the regular three- and four-year curricula and the junior college, so-called, will give way to the "lower division" which will include, as heretofore, preparatory curricula leading to majors in liberal arts and the several professional fields.

For the certification of teachers, the authorized courses (elementary, special elementary, special secondary and junior high school) are offered, and require approximately, three years and four years of work done in residence.

GENERAL INFORMATION.

CALENDAR, 1927-1928

Summer Session, 1927

June 27-August 5, Term I.

August 8-August 30, Term II.

First Semester, 1927-28

September 6, 8:00 a.m., College Aptitude Test.

September 6, 1:30 p.m., Assembly of New Students.

September 7, 8:00 a.m., Examination in Subject A (English Composition).

September 7, 10:30 a.m., Assembly of New Students.

September 7, 1:30 p.m., Fundamentals Test.

September 7, 3:00 p.m., Assembly of New Students.

September 8, 8:00 a.m., Social Relations Test.

September 8, 10:30 a.m., Assembly of New Students.

September 8, 1:30 p.m., Foreign Language Placement Test.

September 8, 3:00 p.m., Assembly of New Students.

September 9, 8:00 a.m., Biology and Botany Placement Test.

September 9, 9:00 a.m. to 4:00 p.m., Registration of Old Students.

September 10, 9:00 a.m. to 4:00 p.m., Registration of New Students.

September 12, Class Work Begins.

December 17, Christmas Recess Begins.

January 1, Christmas Recess Ends.

January 26-January 31, Mid-Year Examinations.

February 1, Mid-Year Graduation Exercises.

February 2-6, Mid-Year Recess.

February 2, 8:00 a.m., College Aptitude Test.

February 2, 1:30 p.m., Assembly of New Students.

February 3, 8:00 a.m., Examination in Subject A (English Composition).

February 3, 10:30 a.m., Assembly of New Students.

February 3, 1:30 p.m., Fundamentals Test.

February 3, 3:00 p.m., Biology and Botany Placement Test.

February 3, 9:00 a.m. to 4:00 p.m., Registration of Old Students.

February 4, 8:00 a.m., Social Relations Test.

February 4, 10:30 a.m., Foreign Language Placement Test.

February 6, 9:00 a.m. to 4:00 p.m., Registration of New Students.

February 7, Class Work Begins.

April 1-8, Spring Recess.

May 1, Dedication Day.

June 15, Annual Commencement Exercises.

Summer Session, 1928.

June 25-August 3, Term I.

August 6-August 29, Term II.

THE CALENDAR AND REGISTRATION.

The college year is divided into the autumn and spring semesters of eighteen weeks each, followed by a summer quarter consisting of a first term of six weeks (the regular Summer Session) and a second term of four weeks in which professional courses of a seminar type are offered to students and teachers whose certification needs may be met by supplemental units of credit (not to exceed 4) earned in this term. Students may enter at the beginning of either semester and at the beginning of Term I of the summer quarter.

The Summer Session meets the needs of regular students who wish to gain credits toward the professional diploma or the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work for the Junior Certificate.

Registration of students will be made from September 8 to September 10. A duly certified transcript of the applicant's record must be in the possession of the registrar on or before the day of the applicant's registration.

N. B.—For details, see "Requirements for Admission."

DEPARTMENTS OF INSTRUCTION.

TEACHER TRAINING.

The College offers courses for the training of teachers in both the primary and upper divisions of the elementary school and the Junior High School with special commendation in English, Social Science, Natural Science, Mathematics, Fine Arts, Industrial Arts, Home Making, Music, and Physical Education. The degree B.A. (major in Education) is granted to students completing the four-year courses in elementary and junior high school education.

Certificate courses for candidates for the elementary certificate and for the elementary special certificates of the several types will continue to be regularly offered for those who wish to teach before completing a degree course. The special certification courses offered include preparation for the certificate of elementary and junior high school grade of the Arts Type (general class), Music Type (public school music), Prevocational Type (home making, occupations and home mechanics), Physical Education Type (physical training activities), and for the special certificate of secondary grade in physical training activities.

Students who wish to enter for special certificate courses should not fail to note the matriculation requirements.

LIBERAL ARTS.

In the Liberal Arts division courses are offered in the following fields: Anthropology, Economics, Engineering, English, Foreign Language, Geography, Graphic Art: History and Political Science, Home Economics, Hygiene, Mathematics, Music, Psychology, Botany, Physics, Chemistry and Zoology.

Descriptions of the courses in both the professional and the collegiate field, with complete information as to admission requirements, will be found on the pages following under the headings "Admission," "Curricula," etc.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER.

All entering students will be required to meet the health standards set by the department of physical education, and all lower division students, unless excused for cause, will be required to take the courses in physical education prescribed for freshmen, and sophomores. Furthermore, each student will be expected as a matter of efficient student and community life, to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. Frequent ratings of the student are made by his instructors, so that he may at all times know where he stands; but the ability of the student to manage his own educational career and to come reasonably near to his best capabilities are factors that will count in final ratings.

Standards of character, as developed by and measured by honest student work, and as revealed by evidences of the possession of thoroughgoing self-respect and community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, and every student will have full opportunity to show that he is worthy and that he has the capacity and will to manifest and develop character.

For the assistance of students and student organizations, adviserships have been established as follows:

THE STUDENT ADVISERS.

Concerning matters of student-body policy, leaves of absence (men), personal advice (men), use of buildings, etc.—The Dean of Men.

Concerning appointments to teaching positions.—The Appointment Secretary

Concerning the housing and living arrangements of students, rules of conduct student social affairs, personal advice (women), rules of attendance, etc.—The Dean of Women.

Concerning supervision of practice teaching, conferences, etc.—The Director of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar.

Concerning health and physical condition, school athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men)

Concerning relations to the training school, to pupils, routine, etc.—The supervisors of training.

Concerning student-body affairs—The executive officers of the student-body The Dean of Men; The Dean of Women.

STUDENT LIFE AND ORGANIZATIONS.

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, The Associated Students. The following list indicates the major activities:

Delta Kappa (Chemistry), Engineering Club, Geography Club, Spanish Club, Art Club, International Relations Club, Two Masque Players, Treble Clef Club, Men's Glee Club, College Orchestra.

Men: Men's Club, Epsilon Eta, Eta Omega Delta, Phi Lambda Zeta, Sigma Lambda, Kappa Phi Sigma, Omega Zeta, Tau Delta Chi, College "Y" Club, The Aztec Club.

Women: Associated Women Students, Women's Athletic Association, College Y. W. C. A., Shen Yo, Sphinx, Fra Di Noi, Komo Klub, Gamma Phi Zeta, Phi Kappa Gamma, Phi Sigma Nu, Sigma Pi Theta, Tau Zeta Rho, S. A. B. E. Club.

Men's Athletics: Football, baseball, basket ball, track, swimming and tennis.

Women's Athletics: Tennis, basket ball, fencing, rowing and swimming.

Publications: The Aztec (weekly), and The Del Sudoeeste (year book).

APPOINTMENT SERVICE.

The department of recommendations has charge of the placement of graduate assisting them in securing teaching positions and assisting superintendents and boards of school trustees in finding qualified teachers.

Recommendations are based on records which indicate every item in the candidate's equipment and particular care is taken to select for nomination in each case a teacher who can meet the requirements of the position.

FEES AND EXPENSES.

Tuition is free to all students.

Registration fee, each semester (not returnable)	\$1
Student body fee, each semester (not returnable)	5
Men's and women's organizations, each (not returnable)	
Class fee	5
Part-time (special student's) fee	2
Late registration fee	
Fee for additional transcript	1

COURSE CHARGES.

(Payable each semester)

Syllabi	\$0
Biology	3
Botany	2
Chemistry 1A-1B, 6AA, 6A-6B, 8-9	7
Chemistry 101-102	2
Chemistry 123-124 (per hour)	2
Chemistry Deposit (each course)	2
Drama 55A, 55B, 55C, 55D	2
Fine Arts (Advanced Design, Costume Design, Stage Craft)	1
Household Art (Clothing, Millinery)	1
Household Science (Dietetics, Food Economics)	4
Industrial Arts 10	1
Pattern Making	4
Industrial Arts 1A-1B, 6, 7, 9	2
Industrial Arts 4, 5	3

Industrial Arts 2	4 00
Physical Education (men)	1 00
Physics (each course, except 2A-2B)	5 00
Physiology	1 00
Surveying	5 00
Zoology	2 00

EXPENSES: WOMEN STUDENTS

The Dean of Women will furnish, upon request, addresses of homes in which board and room may be secured; also a list of apartment houses which may be patronized by women students. Occasionally students are placed in homes where they may work for board and room, but it is not advisable to depend entirely upon such an opportunity because of the irregularity of the demand.

Board and room may be procured for from \$40 to \$45 a month. Apartments, consisting of one room, kitchenette and bath, rated at \$18 to \$35 a month, will accommodate one or two persons. A cafeteria is maintained by the college where on-day meals are served at cost.

The minimum expense for one semester of eighteen weeks is estimated at \$210; board and room, \$180; books, paper and other necessary materials, \$15; registration and student-body fees, \$7.50; laboratory fees, \$1 to \$10. Clothing, laundry, car-fare, recreation and personal incidentals are factors for the student to decide, but it is suggested that clothing be of the simplest type, such as gingham dresses, one-piece woolen dresses, one warm outside coat, and a very informal afternoon or evening dress with suitable accessories.

SELF HELP AND LOAN FUND

Opportunities for part-time employment for students not residents of San Diego are frequent, particularly in the case of young women who are able to assist as mother's helpers in housework or in the care of children. A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily not sufficiently remunerative to reduce expenses materially. An employment service for men is conducted by the Dean of the College. The professional loan fund is administered for students in the teacher training courses, seniors being eligible for assistance. The general loan fund is available for short time loans to worthy young men and women who have been in attendance at the college one or more years. The Kiwanis Club of San Diego and the City Teachers' Association have set aside funds for student loans.

BUILDINGS AND EQUIPMENT

The college building houses the library, the auditorium, the gymnasium, offices, laboratories and classrooms. The training school is housed in three separate units. The building for Applied Arts was made ready for occupancy in September, 1922, as a result of the remodeling of the old Training School Building. A new building for physical education of men was finished January 1, 1923, and new quarters for the physical education of women at the same date.

The institution has facilities and equipment as follows:

- A College Library of 32,000 volumes.
- Laboratories for Physics, Chemistry, and Biological Science.
- Shops, studios and laboratories for the courses in Fine and Industrial Arts and Home Economics.
- For Physical Education, a well equipped gymnasium, lockers and showers, classrooms, and athletic field, tennis courts, etc.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and above, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have the best of both worlds, the warm summers and Egyptian winters.

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than the physical ones must be taken into account by the student choosing a college. The institutions and facilities that make up the "greater college" or the "greater university" must be present in the college or university city, if the student is to work in a genuinely cultural atmosphere. In cultural standards in art, music, literature, and science, San Diego is an eligible college city because while it is not a large city yet it has certain metropolitan advantages for the student. Many of these are to be found in the

heritage resulting from the San Diego Exposition of 1915-1916, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections, and the Director of the San Diego Museum is a member of the faculty of the College. The Art Gallery contains excellent exhibitions of paintings, and there are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings and pageants.

At La Jolla, within the city limits, the Scripps Biological Institute, operated by the University of California, gives opportunity for important cooperation in the biological field.

The pre-engineering courses in the Liberal Arts division will benefit greatly because the selection of San Diego by the United States Navy as the site of important navy activities, such as the Marine Base, the Naval Training Station, Naval Aviation and the Destroyer Force Base, has made available a great deal of machinery, material and equipment useful for study and observation, especially in the field of electrical engineering.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point, particularly as the College will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The professional, teacher-training courses profit because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary schools, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the College.

Much of what is best in modern thought and influences is brought to the student body through its weekly assembly, the programs for which, as arranged by a committee of students and faculty, include almost every worth while type of topic and appeal.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration, class attendance, conduct of examinations, etc., college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system"; but there is a standard of honor as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom or of student-body by-laws) and, usually, are settled by student action.

One problem, in process of solution, is that of student relations to the course of study. At present, the studies are prescribed in arrangements of curricula and "courses," with certain elections by the individual student, and these prescriptive are, of course, necessary. However, an effort is being made to give the student body a certain voice in and responsibility for study arrangements, through a joint committee of students and faculty members.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills and mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round, and the College Outdoor Theater makes possible the presentation of many student productions in drama and pageant.

REQUIREMENTS FOR ADMISSION

I. FRESHMAN STANDING

- a) A graduate of a California high school may enter either the Teacher-Training or the Liberal Arts division of the San Diego State College without examination in preparatory subjects, provided the following requirements are satisfied:
 1. The candidate must be duly certified as a graduate of an accredited California high school.
 2. The graduate must have completed a four-year high school course aggregating at least 15 standard units of preparatory work, including the following requirements for graduation prescribed by the

California State Board of Education: English, 3 units; United States History and Civics, 1 unit; Laboratory Science, 1 unit; and two majors of at least 3 units each—a major consisting of three years of study in one of the following groups: (a) English (in vocational courses 1 unit of Citizenship may be included with 2 units of English to make one major); (b) Mathematics, including Mechanical Drawing; (c) History and Social Science; (d) Physical and Biological Sciences; (e) Foreign Language—3 or more units in one language, or 2 units in each of two languages.

3. The candidate must be specially recommended for admission to the San Diego State College on the basis of a scholarship record that satisfies the prescribed requirements for admission to the University of California.

N. B.—The admission form prescribed by the University of California must be used, and will be furnished upon request.

A candidate from a secondary school outside California that is accredited by the New England College Entrance Certificate Board, by the North Central Association of Colleges and Secondary Schools, or by other colleges and universities of recognized standing will be admitted to freshman standing provided he has satisfied the requirements in (2) above, and has maintained an average scholarship standing well above the mark required by the school for graduation.

A graduate of a California secondary school not accredited who is strongly recommended by the principal of his school will be admitted to freshman standing provided he satisfactorily passes examination in at least 8 units of work selected from subjects prescribed for graduation by the California State Board of Education. Other candidates who are unable to present satisfactory school certificates may be admitted by successfully passing examinations in at least 12 standard high school units.

Certificates of successful examinations before the College Entrance Examination Board will be accepted in lieu of matriculation examinations conducted by the San Diego State College. The entrance examinations of the Board are held in June 1 year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon a blank form to be obtained from the Secretary of the Board upon request.

All students entering the college are required to take the following examinations, mainly for purposes of guidance and assistance: (a) College Aptitude Test. Fundamentals Test (reading, spelling, arithmetic, etc.). (c) English Composition. (d) Social Relations Test. (e) Speech Test. (f) Physical Examination. Exemptions may be made for special students who register for six units of work.

MATRICULATION REQUIREMENTS FOR CERTAIN CURRICULA

In complying with the foregoing requirements for freshman standing it is strongly recommended that the following preparatory subjects be included for admission to the curricula for the A.B. degree (Major in Education) and to the Liberal Arts curricula: to certificates in the curricula in Letters and Science, Commerce, Journalism in the Premedical, Pre dental and Prelegal curricula:

English	3	units
A Foreign Language ¹	2	units
A Laboratory Science ²	1	unit
Algebra	1	unit
Geometry	1	unit
United States History and Civics	1	unit
Electives ³	6	units

¹Two units of French or German are required for admission to the Premedical curriculum.

²Chemistry is required for admission to the curriculum in Letters and Science when the candidate intends to specialize in Home Economics, Physical Education, Hygiene. Chemistry and Physics (2 units) are required for admission to the curricula for the A.B. degree (major in education) when the candidate intends to specialize in General Science and Biology in the Junior High School, to the Premedical curriculum, and to the curriculum in Letters and Science when the candidate intends to specialize in public health, nursing or in a natural science except Botany. Physics is recommended, but not required for students who intend to specialize in Botany.

³Algebraic Theory ($\frac{1}{2}$ unit) and Trigonometry ($\frac{1}{2}$ unit) are required for admission to the Commerce curriculum and the curriculum in Letters and Science when the candidate intends to specialize in Mathematics.

The following preparatory subjects are required for admission to the Liberal Arts curricula leading to certificates in Engineering (Mechanical, Electrical, Civil or Chemical), and in Agriculture and Architecture.

English	3	units
Elementary Algebra	1	unit
Algebraic Theory	$\frac{1}{2}$	unit
Plane Geometry	1	unit
Trigonometry	$\frac{1}{2}$	unit
Physics ⁴	1	unit
Chemistry	1	unit
United States History and Civics	1	unit
Mechanical Drawing ⁴	1	unit
Electives ⁵	5	units

II. ADVANCED STANDING

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a C average. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing. All teachers with experience must present verified statements of successful experience for time (up to five years) for which they wish credit.

N. B.—Transcripts of record from other institutions will not be returned copies of them made.

III. SPECIAL STUDENTS

A candidate not less than 21 years of age who has not had the opportunity to complete a satisfactory high school course but who is considered competent to undertake certain courses may be admitted to special standing in the Liberal Arts curricula. Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever seems advisable. Applicants for admission to special status will be required to take a psychological test before admission. Such students may become candidates for graduation upon satisfying the regular entrance requirements.

A candidate not less than 24 years of age (21 years of age if honorably dismissed from war service, army, navy or auxiliary) may be admitted to special standing in the teacher training curricula and given such credit as may be determined by the Committee on Advanced Standing.

GENERAL REGULATIONS

REGISTRATION

All students are required to register on one of the regular registration days preceding the opening of the class work of each semester. Any continuing student who registers after the close of the first week of the semester is subject to limitation of his study list and to a late registration fee of one dollar a day. Changes of study lists may be made only with the approval of the proper study-lists officer.

A fee of one dollar is charged for a change in the study list after the close of the regular registration period.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements and has demonstrated his ability to do satisfactory college work. The standing of all students is therefore provisional during the first semester of residence.

⁴Physics and Mechanical Drawing are recommended but not required for admission to the curriculum in Agriculture.

⁵French or German (2 units) is required for admission to the curricula in Industrial or Engineering Chemistry.

(NOTE.—Deficiencies in certain subjects may be removed after the candidate has been admitted to freshman standing. The removing of such deficiencies, however, may make it necessary for the student to extend his college course beyond the normal period of time required for its completion.)

A student who enters with credit for a subject in which he did not receive a recommending grade may, under certain conditions, be permitted to remove his matriculation deficiency either (1) by passing an examination in the subject with grade of B or (2) by continuing the same line of study in college in at least units of work with a grade of B.

CLASSIFICATION

Regular students are those students who have complied with the requirements of matriculation and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 28 to 63 units of work are classified as sophomores; those who have completed 64 to 91 units are juniors; and those who have completed 92 or more units are seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work.

Sixteen hours, or units, per week of recitation or lectures, or an equivalent in laboratory work, constitute an average semester's program. During the first semester of work at the College no student will be permitted to register for more than 16 units of work in addition to physical education. After his first semester of work, a student is ordinarily not permitted to register for less than 12 nor more than 18 unit-hours of new work, in addition to physical education, unless permission is given in advance by the proper study-lists officer. Ordinarily not more than 16½ units, in addition to physical education, will be carried toward graduation for the work of any semester, except under the following conditions: a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 unit-hours in the preceding semester and attained an average of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points.

SPECIAL SUBJECT REQUIREMENTS

ENGLISH COMPOSITION

All entrants to the College are required to take a special examination in elementary English composition. No student who has failed to pass this examination or to meet an equivalent requirement will be given a certificate in any curriculum. All students who do not pass in the examination in Subject A are required to take a course in remedial English for which a fee of \$10 is charged. This course is given three hours a week each semester.

PHYSICAL EDUCATION AND HYGIENE

All regular students upon admission to the College must report to the proper health examiner for enrollment in physical education classes. A student may be excused from exercises in physical education on account of illness or physical inability only by petition to the health examiner.

Credit for work in Hygiene (1 or 2) is required in the freshman or the sophomore year.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus one point per unit. Removal of grade E or F will entitle the student to cancellation of the "negative grade points" and a grade of D for the course.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D, otherwise it is changed automatically to an F. The grade E is also used to record work which may be of higher order but

which is incomplete for some acceptable reason. This is done only at the written request of the instructor, filed with the Registrar before the grade E is recorded. As in the former case the work must be completed during the next semester or the grade automatically becomes an F.

To qualify for a certificate in any curriculum or for a transcript of scholarship record in transferring to another collegiate institution, a student must have earned as many grade points as he has earned units of credit; that is, he must have attained an average of at least C grade in all work undertaken at the College.

CONDITIONS AND FAILURES

Credit is not given for courses in which the student has been given a grade of E (conditioned) except upon the removal of the deficiency by supplementary examinations or study. A report of "incomplete" is made only in case the student for good reasons, has been absent from class meetings or examinations or has failed to perform a definite part of the work of the course. A condition of "incomplete" not removed before the end of the following semester is considered a failure. In case of failure in a course no credit is given until the course has been repeated.

PROBATION AND DISQUALIFICATION

A scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the College.

Any student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the College to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the College. Probationary status may be continued until the cumulative grade point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Committee on Scholarship. All applications for reinstatement must be in writing.

ELIGIBILITY FOR EXTRA-CURRICULAR ACTIVITIES

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any semester is ineligible in the next succeeding semester to represent the College in connection with any athletic, literary, musical, dramatic, social, or other organization.

SPECIAL EXAMINATIONS AND REEXAMINATIONS

Entrance examinations and examinations taken for the purpose of removing matriculation deficiencies or making up a course left "incomplete" are regarded as special examinations. Reexaminations are permitted only for the purpose of removing deficiencies incurred in college courses and can not be taken for the purpose of improving the grade mark recorded on the student's permanent record.

A fee of two dollars, payable in advance, is charged for every special examination and reexamination.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. A withdrawal after the sixth week of a semester except for reasons beyond the student's control is interpreted as a failure in the course.

LEAVE OF ABSENCE

A student should apply to his instructor for a leave of absence or an excuse for having been absent from a class exercise. A leave of absence for one or more days should be obtained from the proper dean. An excuse for absence does not relieve the student from completing all the work of each course to the satisfaction of the instructor.

FELLOWSHIPS

Fellowships (without honorarium) have been instituted, a fellowship to be conferred by vote of the faculty on nomination of the department concerned, and to entitle the recipient to special training and to recommendation to county boards of education for the special elementary or the special junior high school certificate.

Candidates must be graduates of California, or equivalent, Teachers Colleges, and must submit satisfactory evidence of special fitness and attainment, or must be able to show two years of college or other equivalent training and special fitness.

Holders of fellowships, who have done one year of satisfactory work will be entitled to recommendation for the special elementary and junior high school certificate; provided, that within the period specified, they are able to meet the requirements of the State Board of Education for special certification.

THE DEGREE COURSES

Following is the general pattern of minimum requirements prescribed by the State Board of Education for the degree Bachelor of Arts. The details of the requirements at this College are found on pages 19-21.

LOWER DIVISION (Freshman and Sophomore Years)

I. Required	40 units
1. Psychology	6 units
2. Social Sciences	12 units
a) Contemporary Civilization	
b) Economics	
c) Political Science	
d) Sociology	
e) Geography	
3. Biological and Physical Sciences	12 units
4. English (including oral English)	6 units
5. Physical Education	4 units
	40 units
II. Required Group Electives ¹	24 units

1. English
2. History
3. Political Science
4. Sociology
5. Education²
6. Biological Sciences
7. Philosophy or Psychology
8. Mathematics
9. Physics
10. Chemistry
11. Geography
12. Greek or Latin
13. Romanic Languages
14. Art
15. Music
16. Agriculture
17. Commerce
18. Physical Education
19. Industrial and Mechanical Arts
20. Home Economics

UPPER DIVISION (Junior and Senior Years)

III. For all degree courses leading to high school certification of teachers of special subjects, the minimum number of units of professional work shall be the same as the minimum number prescribed by the State Board of Education for the certification of high school teachers; the minimum number of professional units for all degree courses leading to elementary certi-

¹Students must choose at least two fields, each not less than 6 units.

²Not more than 12 units in the Education group is to be allowed in the lower division nor more than 40 units in the upper and lower divisions of the four-year curricula. If the Psychology offered in Roman One is Educational Psychology, the units of Education in the lower division shall include the same.

Not more than a total of 50 units in any one subject or group of subjects listed above is to be allowed in the upper and lower divisions of the four-year curricula.

The natural science and group electives must be so arranged as to include 12 units of social science and 12 units of biological and physical science during the course.

fication shall be 24; and for all types the maximum number of professional units shall be 40.

Every degree course leading to elementary school certification shall include adequate preparation in the statutory school subjects,* and not less than eight semester hours in practice teaching.

IV Electives (listed under II above), to be administered on the same conditions as specified above under II ----- 40 units

Total ----- 124 units

*School Law, 1925, section 1665: "Subjects to be taught in the elementary schools. The course of study in the elementary schools of each city, county, and city and county shall include instruction in the following branches in the several grades in which each may be required in the course of study adopted in pursuance of this section, viz: (1) reading, (2) writing, (3) spelling, (4) language study, (5) arithmetic, (6) geography, (7) history of the United States and California, (8) civics, including a study of the constitution of the United States, (9) music, (10) art, (11) training for healthful living, (12) morals and manners."

A student entering a State Teachers College without 2 years of Mathematics (other than Arithmetic) and 2 years of one Foreign Language must complete (before he receive the Baccalaureate Degree) 1 year (6 units) of Mathematics and 1 year (10 units) of a Foreign Language.

Individuals or groups of individuals wishing to teach before completing the full course may pursue in the lower division the work listed for the upper division. It is understood that such an inversion of sequence is approved that the student may enter the teaching service. If the student fails, after four years, to return to a State Teachers College for the completion of his work, his candidacy for the degree automatically lapses. If he returns after his candidacy has lapsed, the work previously taken will be evaluated upon a basis of the requirements in effect at the time of his return.

Each institution is authorized to adjust its several courses for the training of teachers to the minimum requirements herein prescribed, provided that they meet the requirements of the State Board of Education for certification in the various fields.

GRADUATION

For the A.B. degree a minimum of 124 units is required. These are to be arranged according to one of the plans for the professional courses, at least 2 units of which must have been done in residence at this College of which 1 unit must have been earned in the last semester before graduation. The latter provision shall not apply to graduates from the elementary course of the College until September 1, 1929. For the requirements of the major in education in the Letters and Science curriculum see pages 22-23.

For the elementary diploma a minimum of 96 units is required according to the pattern for that course. At least 16 units must be done in residence at this college 12 of which must be earned in the last semester before taking the diploma.

For the junior certificate a minimum of 64 units is required according to an approved pattern of which at least 12 units have been done in residence.

PROFESSIONAL COURSES

THE ELEMENTARY DIPLOMA COURSE

Freshman Year

	Units Credit
English -----	6
Orientation -----	1
Introductory Principles of Education I -----	3
Introduction to Geography, Elements 1A and Regions 2A -----	4
Mathematics in the Elementary School, Ed. XII -----	2
Physical Education -----	1
Electives ¹ -----	15
Total -----	32

¹Electives must be so chosen that the student will have a total of twelve units of credit in Social Science (Contemporary Civilization, Political Science, History, Economics, Sociology, Anthropology) and twelve units of Biological and Physical Science. They must include six units in Biology and three units in American History unless the student presents recommended grades in these subjects from high school. Electives in the Junior Year must include a minimum of four units of upper division courses in the Liberal Arts curricula.

Sophomore Year

	Units of Credit
Psychology 2A and 2C	6
Primary Curriculum, Ed. IIA ²	2
Children's Literature, Ed. XIV	2
Science in the Elementary School, Ed. XVII ³	2
Science in the Elementary School, Ed. XIX ³	2
Physical Education, LII, LIII, 52C or 52D	3
Electives ¹	15
Total	32

Junior Year

Elementary School Curriculum, Ed. CIV	3
Educational Measurements, Ed. CVIII	3
Educational Psychology	2
Science Teaching, Ed. CXVI	3
United States Constitution (Pol. Sci. 101) and the Public School System	3
Electives ¹	13
Total	32

CURRICULA FOR THE A.B. DEGREE

ELEMENTARY SCHOOL COURSE

Freshman Year

English	6
Orientation	1
Introductory Principles of Education I	3
Introduction to Geography, Elements 1A and Regions 2A	4
Mathematics in the Elementary School, Ed. XII	2
Physical Education	1
Electives ¹	15
Total	32

Sophomore Year

Psychology 2A and 2C	6
Primary Curriculum, Ed. IIA ²	2
Children's Literature, Ed. XIV	2
Science in the Elementary School, Ed. XVII ³	2
Science in the Elementary School, Ed. XIX ³	2
Physical Education, LII, LIII, 52C or 52D	3
Electives ¹	15
Total	32

Junior Year

Elementary School Curriculum, Ed. CIV	3
Educational Measurements, Ed. CVIII	3
Educational Psychology	2
Science Teaching, Ed. CXVI	22
Electives ¹	
Total	30

Senior Year

United States Constitution (Pol. Sci. 101) and the Public School System	3
Principles of Elementary Education, Ed. CVI	3
Science Teaching, Ed. CXVI	10
Electives ¹	14
Total	30

¹See footnote page 18.

²In certain exceptional cases this course will not be required, especially when students are qualifying for special credentials.

³Students who are not specially proficient in Music and Art or who have not taken courses in these subjects in high school will be required to elect Music Coach and Art Coach XVIII as prerequisites.

JUNIOR HIGH SCHOOL COURSE

Freshman Year

	Units of Credit
English	6
Orientation	1
Introductory Principles of Education I.....	3
Physical Education	1
Electives ¹	21
Total.....	32

Sophomore Year

Psychology 2A and 2C	6
Physical Education LII, LIII, 52C or 52D.....	3
Electives ¹	23
Total.....	32

Junior Year

Elementary School Curriculum, Ed. CIV	3
Educational Psychology	2
Educational Measurements, Ed. CVIII.....	3
Electives ¹	22
Total.....	30

Senior Year

United States Constitution (Pol. Sci. 101) and the Public School System.....	3
Principles of Junior High School Education and Guidance, Ed. CI.....	3
Practice Teaching, Ed. CXVI	10
Electives ¹	14
Total.....	30

The Junior High School requires departmental teachers who have specialization in particular fields. The electives of this course together with the required subjects must be so patterned as to include a major of 24 units of credit in each of two fields or a major in a given field and a minor of 12 units in each of two other fields.

For a special recommendation to teach General Science and Biology in the Junior High School, the applicant should satisfy the requirements outlined in the foregoing course and should include in his course a minimum of 40 units of science selected from the following list with the approval of the science staff.

*1. Biology 10A-10B	6
*2. Botany 2A-2B	8
*3. Botany 4	4
*4. Zoology 1A-1B	8
5. Embryology	2
6. Astronomy 1	3
†7. Physics 2A-2B	6
†8. Physics 3A-3B	2
9. Chemistry	10
10. Anthropology 1A-1B	4
11. Physiology CXXV	4
12. Seashore Biology 101	1
13. Heredity and Evolution	2
14. Eugenics	3
15. Bacteriology	4
16. Geology	2
17. Ecology (Bot. 101)	2
18. Meteorology	2

¹²³ See footnotes to the Elementary Diploma Course. At least ten of the electives in the Senior Year must be upper division courses. Not to exceed forty units credit in courses in Education may be applied toward a curriculum leading to a degree. The electives must also include one year (six units) of mathematics and two years of mathematics were taken in high school and one year (ten units) of foreign language, if not previously taken in high school.

¹See footnotes to the Elementary Diploma Course and to the Elementary School Course leading to the A.B. Degree.

*Either Biology 10A-10B and Botany 4, or Botany 2A-2B and Zoology 1A-1B must be included in this list. Students who have taken Chemistry in the high school are not required to take it in college.

†Required subject.

The 32 units of Education required must include the course Education CXX, the teaching of Science in the Junior High School, and must include some practice teaching of Junior High School Science.

CURRICULA FOR SPECIAL CERTIFICATION

NOTE.—The curricula for special credentials of elementary and junior high school grade must meet the requirement of (a) three years of training (90 to 96 credits) beyond the completion of a standard high school course, or (b) two years of such training and either two years of successful experience in teaching the subject or subjects named in the credential or two years of practical experience in the field of the subject.

The curricula for special credentials of secondary school grade must include (a) four years of training (120 to 128 units) beyond the standard high school course, or (b) two or three years of such training and either two to four years of successful experience in teaching the subject or subjects named in the credential or two to four years of practical experience in the field of the subject.

The requirements for special certification will be sent upon application. Curricula are offered in the following fields:

PHYSICAL EDUCATION TYPE (Physical Training Activities)

Credential of Elementary and Junior High School Grade.
Credential of Secondary School Grade.

ARTS TYPE

Credential of Elementary and Junior High School Grade.

MUSIC TYPE (Public School Music)

NOTE.—Students may matriculate for this curriculum only upon the fellowship outlined on page 19 of this bulletin. Applicants for admission should send complete transcripts of record showing the number of units of work in music completed.
Credential of Elementary and Junior High School Grade.

PREVOCATIONAL TYPE (Home Making)

Credential of Elementary and Junior High School Grade.

PREVOCATIONAL TYPE (Occupations and Home Mechanics)

Credential of Elementary and Junior High School Grade.
(Offered for the "Limited Class" only)

REQUIREMENTS FOR THE JUNIOR CERTIFICATE IN THE LIBERAL ARTS CURRICULA

LETTERS AND SCIENCE CURRICULUM

(With the required entrance credits and a proper selection of electives in the freshman and sophomore years, the curriculum in Letters and Science will prepare the major work required for an A.B. degree in the following subjects: Anthropology, Astronomy, Botany, Chemistry, Economics, Education, English, French, German, Graphic Art, History, Household Art, Household Science, Mathematics, Physical Education, Physics, Political Science, Psychology, Public Speaking, Spanish, Sociology.)

General Requirements for All Students.

College Aptitude Test.

An examination in Subject A (English Composition).

Hygiene, 1 unit, (Men), 2 units (Women).

Physical Education, 2 units.

Social Ethics.

Orientation, 1 unit.

English, 6 units.

Foreign Language.

At least 15 units in not more than two languages. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

c) Mathematics.

High school courses in elementary Algebra and Geometry.

d) Natural Science, 12 units.

A maximum of 6 units chosen from the following:

- High School Physics,* 3 units.
- High School Chemistry,* 3 units.
- ¹High School Botany, 3 units.
- ¹High School Biology, 3 units.
- ¹High School Physiology, 3 units.
- ¹High School Zoology, 3 units.

A minimum of 6 units chosen from the following:

- Astronomy 1, 3 units.
- Biology 10A-10B,* 6 units.
- Botany 2A*-2B,* 8 units; Botany 4, 3 units.
- Chemistry 1A*-1B,* 10 units; 6A*-6B,* 6 units; 8-9,* 6 units.
- Geology 1A, 3 units.
- Physics 2A-2B, 6 units; 3A-3B,* 2 units; 1A-1B* and 4A-4B,* 12 units.
- Zoology, 1A*-1B,* 10 units.

e) Foreign Language, additional to (b) or Mathematics, additional to (c); 6 units chosen from the following:

- French: Any two consecutive courses of A, B, C, D, 102A, 102B, 105B, SC, SD.
- Spanish: Any two consecutive courses of A, B, C, D, 102A, 102B, 105B, 110A, 110B.
- German: Any two consecutive courses of A, B, C, D, SC, SD.
- Latin: Two years of High School Latin, each year counting as 3 units.
- Mathematics: 1A-1B or 3A-3B.

f) Social Science, 12 units, chosen from the following:

- Anthropology, 1A-1B, Commercial Law 18A-18B.
- *Economics 1A-1B, Economic History 11, *Geography 1, 2.
- *History 4A-4B, *5A-5B, *8A-8B, *Political Science 1A-1B.
- *Psychology 2A-2B, Sociology 50.

g) Courses required for the major.

See subjects listed under each major subject in the descriptive list of courses of instruction.

Upper Division

A minimum of 36 units of Upper Division courses is ordinarily required for degree of A.B. in Liberal Arts curricula in Class A colleges and universities. A minimum of 12 units of this requirement should be met in the junior year. San Diego State College does not offer senior work in the Liberal Arts curriculum except in an education major.

A.B. DEGREE IN LETTERS AND SCIENCE CURRICULUM, MAJOR IN EDUCATION.

Candidates for the A.B. degree in the San Diego State College who intend to qualify for graduate work, in another collegiate institution, leading to a state teaching credential of senior high school grade are advised to major in education in the Letters and Science curriculum and to plan their course of study to meet the following requirements:

Lower Division

The following subjects should be taken as a part of or in addition to the requirements for the Junior certificate in the Letters and Science curriculum: Education I, Biology 10A, or high school Biology, Biology 10B or Zoology 10B, Psychology 2A and 2B or 2C, and Economics 1A-1B or Political Science 1A-1B.

Upper Division

Education CI, CII, CIII, CIV, CVI, CVII, CVIII, CIX, CXXX, CXVI, Elementary Statistics 140A, 2 units (U.C. Ext. Div.) and Political Science 101 or equivalent.

For graduation the student should also satisfy the requirements of two Terminal Minors of not less than 14 units each, at least 6 of which must be in the Letters and Science curriculum.

*One of the courses marked with an asterisk must be chosen to meet the Natural Science requirements and the Social Science requirement, respectively.
¹High school courses in Biological Sciences can not be used to meet the Natural Science requirements of the University of California.

division courses, or one Teaching Major of not less than 24 units, at least 12 units which must be in upper division courses. A Teaching Major or Minor may be chosen from the following: English, History, Economics, French, Spanish, Chemistry, and Geography. A Teaching Minor may be chosen also from the following: Art, Fine Arts, Mathematics, Political Science, Psychology, Zoology, Physical Education, and Music.

The remaining units necessary to meet the degree requirement of 124 units should be chosen outside the field of education, except the Teaching Minor in Physical Education.

COMMERCE CURRICULUM

General Requirements.

College Aptitude Test.

An examination in Subject A (English Composition).

Hygiene, 1 unit (Men), 2 units (Women).

Physical Education, 2 units.

Social Ethics.

Orientation, 1 unit.

English Composition, 6 units.

A reading knowledge of French, Spanish, or German, 9 units.

(A high school language may be used to satisfy this requirement in part or in whole, each year-course counting as 3 units.)

History 4A-4B, 8A-8B, or Political Science 1A-1B, 6 units, or any combination of the foregoing courses.

Geography 1, 3 units, and Geography 2, 3 units.

Mathematics of Investment 2, 3 units.

(Prerequisites: Mathematics A and C, or 1A-1B, or their equivalents.

Natural Science, 9 units.

(This requirement may be satisfied in part by high school courses in Physics and Chemistry, each year-course counting as 3 units.)

Economics 1A-1B, 6 units.

Electives.¹

Upper Division

Requirements for senior standing in the Commerce curriculum, besides those of Junior Certificate, include Accounting 14A-14B, 8 units; Business Law 18A-18B, 6 units; Economic History 11, 3 units; Political Science 101, 2 units; Economic History 100, 2 units; Money and Banking 135, 3 units; and Elementary Statistics A-B, 4 units (U.C. Ext. Div.) The San Diego State College does not offer senior work in the Commerce curriculum.

PRELEGAL CURRICULUM

The requirements of the Letters and Science curriculum or, in special cases, the Commerce curriculum should be met in full.

Electives recommended:

History 4A-4B, 6 units.

Economics 1A-1B, 6 units.

Political Science, 1A-1B, 6 units.

Public Speaking, 1A-1B, 6 units.

Sociology 50, 3 units.

Psychology 2A-2B, 6 units.

Accounting, 14A-14B, 8 units.

Business Law 18A-18B, 6 units.

English 52A-52B.

Third year:

Required: History 171A-171B and a minimum of 6 additional upper division units.

PREMEDICAL CURRICULUM

The requirements of the Letters and Science curriculum should be met in full.

Additional requirements:

Chemistry 1A-1B, 10 units.

Chemistry 6A-6B, 6 units, 8-9, 6 units.

Zoology 1A-1B, 8 units.

A reading knowledge of German or French (3 years of High School German or French or 10 units of college German or French).

c) Third year (Required) :

Physics 2A-2B, 6 units.
 Physics 3A-3B, 2 units.
 Chemistry 101-102, 8 units.
 Zoology 100, 2 units.
 Political Science 101, 2 units.

PREDENTAL CURRICULUM

a) The requirements of the Letters and Science curriculum should be met in full.

b) Additional requirements :

Chemistry 1A-1B, 10 units.
 Chemistry 8-9, 6 units.
 Zoology 1A-1B, 10 units, or Biology 10A-10B, 6 units.
 Physics 2A-2B and 3A-3B, 8 units.

PREARCHITECTURAL CURRICULUM

a) The requirements of the Letters and Science curriculum should be met in full.

b) Additional requirements (first year) :

Mathematics 3A-3B, 6 units.
 Physics 1A-1B, 6 units.
 Art A-B, 4 units.
 Art 6A-6B, 4 units.

SOCIAL SERVICE CURRICULUM

a) The requirements of the Letters and Science curriculum should be met in full.

b) Additional requirements :

Economics 1A-1B, 6 units.
 Biology 10A-10B, 6 units; or Zoology 1A, 4 units; or Physiology XXV,
 Anthropology 1A-1B, 4 units.
 Sociology 50, 3 units.
 Biology 10A-10B, 6 units; or Zoology 1A, 4 units; or Physiology XXV,
 4 units.
 Political Science 1A-1B.
 History 4A-4B, or 5A-5B, or 8A-8B.

c) Third year (Required) :

History 171A-171B and a minimum of 6 additional upper division units.

MECHANICAL, ELECTRICAL, CIVIL AND MINING ENGINEERING CURRICULA

First Year

	Sem. I Units	Sem. II Units
Mathematics 3A-3B	3	3
Physics 1A-1B	3	3
Chemistry 1A-1B	5	5
Plane Surveying 1A-1B	3	3
Orientation	1	
Hygiene 1		1
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics		
History or Political Science	3	3
	18 $\frac{1}{2}$	18 $\frac{1}{2}$

Second Year

Mechanical and Electrical Engineering

Mathematics 4A-4B	3	3
Physics 1C-1D	3	3
Descriptive Geometry 3D	3	
Machine Drawing and Design 6A	1	4
Applied Mechanics 1A	3	
Electrical Engineering 1		3
Pattern Making 8A-8B	2	2
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
English	3	3
	18 $\frac{1}{2}$	18 $\frac{1}{2}$

Civil Engineering

	Sem. I Units	Sem. II Units
Mathematics 4A-4B	3	3
Physics 1C-1D	3	3
Descriptive Geometry 3D	3	
Geology IA		3
English	3	3
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Railroad and Irrigation:		
Applied Mechanics IA	3	
Pattern Making 8A-8B	2	2
Electives	1	4
	18 $\frac{1}{2}$	18 $\frac{1}{2}$
Military and Municipal:		
Chemistry 8-9	3	3
Chemistry 6A-6B	3	3
	18 $\frac{1}{2}$	18 $\frac{1}{2}$

CURRICULUM IN INDUSTRIAL AND ENGINEERING CHEMISTRY

First Year

Mathematics 3A-3B	3	3
Physics 1A-1B	3	3
Chemistry 1A-1B	5	5
German A-B	5	5
Orientation	1	
Hygiene 1		1
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Civil Ethics		
	17 $\frac{1}{2}$	17 $\frac{1}{2}$

Second Year

Mathematics 4A-4B	3	3
Physics 1C-1D	3	3
Chemistry 6A-6B	3	3
Chemistry 8-9	3	3
English	3	3
History or Political Science or Economics	3	3
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
	18 $\frac{1}{2}$	18 $\frac{1}{2}$

PREAGRICULTURAL CURRICULUM

First Year

Civil Ethics		
Orientation	1	
Hygiene 1	1	
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Botany 2A-2B	4	4
Chemistry 1A-1B	5	5
Physics 2A-2B	3	3
English	3	3
Math. C or Elective	2 $\frac{1}{2}$	2
	17 $\frac{1}{2}$	17 $\frac{1}{2}$

Second Year

Chemistry 6A-6B	3	3
Chemistry 8-9	3	3
Geology 1A-1B	4	4
Economics 1A-1B	3	3
Drafting 1A-1B	3	3
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

CURRICULA IN ACCOUNTANCY AND SECRETARIAL TRAINING

The aim in giving courses in Accountancy and in Secretarial Training is offer a business preparation of college grade. The courses are open to high school graduates who majored in commercial subjects as well as to those who have had training for business. Candidates of not less than twenty-one years of age who have not completed four years of high school work may also be admitted as special students. The curricula have been formulated with a recognition of the varying needs of those who plan to engage actively in commercial pursuits. To this end courses of one and of two years in length are provided in Accountancy and Secretarial Training, or in a combination thereof. A minimum of 64 units credit is required for a certificate.

It is the intention in the different courses to encourage individual research work in order that the student may become more resourceful, self-reliant, and keener to analyze and cope with business conditions and problems. To furnish material for this work, the city of San Diego will be used as a laboratory, through the cooperation of merchants, manufacturers, transportation men and financiers.

One-Year Course

ACCOUNTANCY

	Sem. I Units	Sem. Unit
Accounting 14A-14B -----	4	4
Commercial Law 18A-18B -----	3	3
English Composition -----	3	3
Business Mathematics A -----	1	
Typewriting 1A-1B -----	4	4
Social Ethics -----	1	
Hygiene -----	1	
Elective -----		2
	16	16

Two-Year Course (leading to Certificate in Accountancy)

First Year

Accounting 14A-14B -----	4	4
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	1	
Orientation -----	1	
Hygiene -----		1
Physical Education -----	$\frac{1}{2}$	
Social Ethics -----		
English Composition -----	3	3
Electives -----	3	3
	16 $\frac{1}{2}$	15

Second Year

Advanced Accounting 60A-60B -----	3	3
Commercial Law 18A-18B -----	3	3
Economics 1A-1B -----	3	3
Psychology 2A-2B or Electives -----	3	3
Office Methods 3A -----		3
Physical Education -----	$\frac{1}{2}$	
Economic History 11 or Electives -----	3	
	15 $\frac{1}{2}$	15

SECRETARIAL TRAINING

One-Year Course

Accounting 14A -----	4	
Shorthand 1A-1B -----	5	5
Typewriting 1A-1B -----	4	4
English Composition -----	3	3
Business Mathematics A -----		1
Office Methods 3A -----		3
Social Ethics -----		
	16	16

Two-Year Course (leading to Secretarial Certificate)

First Year

	Sem. I Units	Sem. II Units
Shorthand 1A-1B	5	5
Typewriting 1A-1B	4	4
Business Mathematics A	1	
Hygiene 2		2
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics		
Orientation	1	
English Composition	3	3
Electives	3	3
	<u>17$\frac{1}{2}$</u>	<u>17$\frac{1}{2}$</u>

Second Year

Commercial Law 18A-18B	3	3
Office Methods 3A		3
Economics 1A-1B	3	3
Accounting 14A-14B	4	4
Psychology 2A-2B or Electives	3	3
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Economics History 11 or Electives	3	
	<u>16$\frac{1}{2}$</u>	<u>16$\frac{1}{2}$</u>

ACCOUNTANCY AND SECRETARIAL TRAINING

First Year

Accounting 14A-14B	4	4
English Composition	3	3
Typewriting 1A-1B	4	4
Business Mathematics A	1	
Orientation	1	
Hygiene		1
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics		
Electives	3	3
	<u>16$\frac{1}{2}$</u>	<u>15$\frac{1}{2}$</u>

Second Year

Advanced Accounting 60A-60B	3	3
Commercial Law 18A-18B	3	3
Office Methods 3A		3
Economics 1A-1B	3	3
Shorthand 1A-1B	5	5
Physical Education	$\frac{1}{2}$	$\frac{1}{2}$
Electives	2	
	<u>16$\frac{1}{2}$</u>	<u>17$\frac{1}{2}$</u>

COURSES OF INSTRUCTION

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks. Credit for 64 units, or more, according to the course chosen, is required for a certificate.

Courses numbered from 1 to 99 and I to XCIX are freshman or sophomore (lower division) courses; those numbered from 100 to 199 and C to CXCIX are junior or senior (upper division) courses, available only, except by special arrangement. Courses similar to those of the University of California are designated by the numbers used by the University.

ANTHROPOLOGY

The major in Anthropology (lower division). Anthropology 1A, 1B. The major (junior year): Anthropology 103 and 104; 6 units chosen from the following: Zoology 114, 115, Geography 121, Psychology 145.

1A. General Anthropology: Origin and Antiquity of Man HEWET
Man as an animal; heredity; races and race problems; earliest culture.
Two units; second semester.

1B. General Anthropology: Origin and Development of Civilization HEWET
The source and growth of institutions, art, customs, industries, language, and religion. Prerequisite: Anthropology 1A.
Two units; second semester.

103. Outlines of Culture Growth HEWET
Human origins and classification; beginnings of culture; growth of civilization in the great centers of Egypt, Europe, and Asia; diffusions in Africa and Oceania; belated and marginal peoples; world religions and international contacts.
Three units; one semester.

104. Culture History of the Southwest HEWET
Origin and culture of the Indians of the Southwest; their arts, customs, industries, beliefs.
Three units; one semester.

ASTRONOMY

The major in Astronomy (lower division): Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-3B, Physics 2A-2B and 3A-3B or 1A-1B and 1C-1D, reading knowledge of French or German.

1. Descriptive Astronomy SKILLI
This cultural course is planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are made. Especial attention is given to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with six-inch Alvin Clarke telescope is used for observation. Also a good selection of lantern slides is used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry.

Three units; either semester.

BOTANY

The major in Botany (lower division): Botany 2A-2B, High School Chemistry or its equivalent.

2A. General Botany C
A study of the fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.
Four units; first semester.

2B. General Botany C
A continuation of 2A treating morphology and relationships of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.
Four units; second semester.

California Plants

Lectures, laboratory exercises and field work on the classification and ecology of plants of the San Diego region. One lecture and two three-hour laboratory periods per week.

COY

Three units; second semester.

Plant Communities

A study of plants in relation to environment; the development of plant associations and the factors influencing plant distribution. Lectures, assigned readings and reports. Prerequisite: Botany 2A-2B or equivalent.

COY

Two units; second semester.

BIOLOGY

For courses under this head see Botany, Nature Study; Physiology and Zoology.

CHEMISTRY

The major in Chemistry (lower division): Chemistry 1A-1B, with a grade of C or better. Chemistry 6A-6B, 8-9, Physics 2A-2B or 1A-1B, Mathematics C and 3B, or their equivalents, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

The major (junior year): 101, 102, 123, 124.

1B. General Chemistry

PIERCE, GILKEY

The general principles, laws of chemical combination and a description of the elements and their important compounds. Two lectures, one quiz and two laboratory sessions per week. The second semester laboratory is Qualitative Analysis throughout. Prerequisite: High School Chemistry or High School Physics and trigonometry.

Five units; both semesters.

1A. Qualitative Analysis

PIERCE

A study of qualitative separations and theories as applied not only to solutions but to ores, slags, alloys, and solid salts. One hour lecture and quiz, three laboratory periods. Prerequisite: Chemistry 1A-1B.

Four units; first semester.

6B. Introductory Quantitative Analysis

PIERCE

The work consists of determinations by gravimetric, volumetric and electrochemical analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Three units; both semesters.

Organic Chemistry

GILKEY

A study of the carbon compounds (aliphatic and aromatic) and their derivatives, including the synthesis of different compounds and the proof of their constitution. General consideration of the subject and the principles involved. Two lectures or one and one laboratory period, first semester; one lecture or quiz and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B.

Three units; both semesters.

102. Advanced Inorganic Chemistry

PIERCE

The course treats of the laws and theories of elementary work from the point of physical chemistry. The laboratory work covers such typical items as laws, mol weights, laws of combination, Ionization, Equilibria (homogeneous, heterogeneous and complex) and electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: 1A-1B, 6A-6B, 8-9.

Four units; both semesters.

124. Organic Preparations

PIERCE

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. A reading knowledge of German is desirable. Laboratory and references. Prerequisite: 8-9. Hours to be arranged.

Two to five units; both semesters.

ORIENTATION.

An orientation course planned to furnish educational guidance and to encourage a scientific attitude in the analysis and solution of problems in the field of human engineering. Lectures and collateral reading. Required of all freshmen.

One unit; either semester.

A. G. PETERSON

ECONOMICS.

The major in Economics (lower division): Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 2A-2B; Geography 1 and 2. Recommended: Sociology 50, Accounting 14A-14B, Commercial Law 18A-18B.

The major (junior year): Economics 100 and 135 and six upper division units in History, Geography or Political Science.

A. Social Ethics

COLDWELL

Required of all entering students. This course aims to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society-men to society. One hour per week for 9 weeks.

1A-1B. Principles of Economics

A. G. PETERSON

A careful consideration is given to the basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; interest, wages, and profit; competition, monopoly, and large scale production; poverty, economic waste, and luxury; money and banking, international trade and transportation corporations, labor problems, socialism, taxation, etc. The aim of the course is (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and (3) to introduce the future citizens to the political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Three units; both semesters.

11. Economic History of the United States

WEAVER

A comprehensive survey of American economic development and of national legislation in the field of industry.

Three units; second semester.

50. General Sociology

K

The object of the course in sociology is twofold: To familiarize the student with the forces and laws under which society is formed and to bring him so far as possible into touch with specific contemporary problems, so that he may adapt himself to his responsibilities as a member of the social group and as a citizen. General sociology includes the study of the antiquity of man, racial evolution, religion, morals, customs, laws, family and state and the biological, economic, and psychological aspects of society. Lectures, discussions, quizzes with a text and collateral reading. Not open to freshmen. Prerequisites: Recommended: Economics 1A-1B, Biology 10A-10B and Psychology 2A-2B.

Three units; one semester.

100. Economic Theory

Advanced study of demand and supply, production and distribution, economic welfare.

Two units; first semester.

135. Money and Banking

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A.

Three units; second semester.

122. Business Investigations and Analysis

A. G. PETERSON

Research in the field of business and industry in cooperation with the Diego Chamber of Commerce. Prerequisite: Economics 1A-1B.

One to three units; second semester.

145. Social Psychology

(See Psychology.)

A-18B. Commercial Law

STANTON

The object of the course in commercial law is to give clearly and concisely the leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions are given, rather than development of those principles. The subjects covered are contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance and wills, with a brief study of evidence.

Three units; both semesters.

-1B. Typewriting

AMSDEN

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms, tabulation and billing; specifications, legal forms and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit is given for this course except in the curricula in accountancy and secretarial training. Ten hours lecture and laboratory practice.

Four units; both semesters.

. Typewriting

AMSDEN

A short course designed for those who do not wish to enter the business office but desire a knowledge of the use of the typewriter. Five hours laboratory practice. Ordinarily no credit is given for this course.

Two units; either semester.

-1B Stenography

AMSDEN

An intensive course designed for the practical preparation of office secretaries. A thorough study is made of the Gregg System and the ability to read and write shorthand rapidly and correctly, both literary and commercial, is developed. The shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit is given for this course except in the curricula in accountancy and secretarial training.

Five units; both semesters.

. Stenography

WRIGHT

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches and literary material.

Three units; second semester. (Not offered in 1927-28.)

Office Methods and Appliances

WRIGHT

Practice and principles of office management, including organization, arrangement and operation. Study and use of modern office appliances, such as the typograph, mimeograph, filing devices, calculating and bookkeeping machines. Trips made to local establishments to study at first hand actual business conditions. Prerequisite: Typewriting 1A or its equivalent.

Three units; second semester.

Business Mathematics

WRIGHT

A practical course in the mathematics of business. The ability to add, subtract, divide rapidly and accurately is developed. A thorough study is also made of interest, compound interest, discount, amortization tables, insurance rates, etc. Credit is given only in the curricula in Accountancy and Secretarial Training.

One unit; first semester.

-14B. Accounting

WRIGHT

A knowledge of bookkeeping is not required nor is it of advantage. A study is made of the balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions and consolidations; branch office accounting, etc., keeping in view the best modern accounting practice. Eight hours lecture and laboratory.

Four units; both semesters.

-60B. Advanced Accounting

WRIGHT, EVERTS

The second year consists of an intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, conduct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory.

Three units; both semesters.

EDUCATION

I. Education—Introductory Principles

JOHNSON, AULI

This is the first required course in the study of education and has as its purpose the orienting of the mind of the student toward education and teaching. A preliminary survey of the field is made and of the theories and general principles applying to education in a modern democratic society. It also functions as a course in vocational guidance in that it seeks to acquaint the student with the qualities needed for success in teaching and helps him to appraise his own possibilities.

In the survey of this field of public education a study is also made of public and quasi-public organizations which more or less directly participate in the program of education. Especial note is made of the Parent-Teacher Association and its functions.

Open only to students who have passed the Fundamentals Test.

Three units; either semester.

II. Primary School Curriculum

HAMMACK

A study of the activities of the first three grades of the elementary school. Special emphasis is placed upon beginning reading and frequent demonstration lessons are conducted.

Open only to students who have passed the Fundamentals Test.

Two units; either semester.

CI. Principles of Junior High School Education

HAERD

This course deals with the principles of educational science that should underlie the organization, administration and curriculum of the secondary school, especially in the junior high school field. The prevailing patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to that of articulation of the secondary school with the lower and higher schools.

Two units; one semester.

CII. Education for Citizenship

NID

An analysis of the ideals and habits essential for good citizenship followed by a study of the part which each school subject and activity contributes to the development.

Two units; either semester.

CIII. Public Education in California

HAERD

A study of the structure, organization and administration of the California school system, as given in the school law of the State, and as interpreted by the rulings of the State Superintendent of Public Instruction, the Attorney General and the California courts. It is intended to give to prospective teachers a conception of the historical development and the main features of the California school system.

Two units; either semester.

CIV. Elementary School Curriculum

AULI

A study of the materials and activities of the elementary school and of accepted techniques in teaching. A summary and evaluation is made of the results of scientific investigations in this field. Special emphasis is placed on the teaching of English. Open only to students who have passed the Fundamentals Test.

Three units; either semester.

CV. Intelligence Testing

BE

A brief review of the history and rationale of intelligence testing is followed by a discussion of the Stanford revision of the Binet-Simon Test, with demonstration and practice. The best group tests of intelligence are discussed and demonstrated. Experience in giving, scoring and interpreting results is required. The purpose of this course is to give teachers information on the subject, to enable each student to find out if by inclination and endowment he is fitted to do scientific testing and to put him in the way of becoming skilled in giving and interpreting intelligence tests.

Three units; one semester.

CVI. Principles of Education

JOHNSON

This course is designed as a culmination of the studies of education and is a procedure. It is a study of the biological, psychological and social principles underlying modern education, in connection with the demands of modern society in a complex social, economic and scientific world, with a view to the formulation of a working philosophy for the educative process.

Two units; one semester.

VII. History of Education

JOHNSON, HARDY

The course includes a brief study of early Hebrew, Greek, Roman and early Christian Education, of the changes brought about by the Renaissance, of the transition to modern secular education, and includes brief reviews of the educational philosophies of the great reformers, together with a concluding study of the development of the American school system and of American ideals and practices in education.

Three units; one semester.

VIII. Educational Measurements

BELL

This course consists of a brief survey of the history of scientific measurement in the elementary field, and a study of the nature of intelligence tests, especially of the practical uses of group intelligence tests. The greatest stress, however, is laid upon the practical uses of achievement tests. The Stanford Achievement Tests given to the entire training school and to many college students furnish a great part of the data used. Simple statistical training in handling data is acquired through practical problems. Open only to students who have passed the Fundamentals Test.

Three units; either semester.

IX. Educational Administration and Supervision

JOHNSON

A survey of the systems of organization, classification and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc.

Two units; one semester.

X. Educational Organization and Supervision

JOHNSON

A study of types of supervision and methods of evaluating and improving teaching.

Two units; one semester.

XVI. Practice Teaching.

Systematic observation, participation and actual teaching under competent supervision in the Training School and in the city schools of San Diego. A limited amount is also afforded in rural and ungraded schools.

The general plan for an inexperienced teacher is to take one period of practice teaching daily for a semester and a half day of teaching for another semester. The former is usually credited with two or three units and the latter with from six to eight, the amount of credit given in each case depending upon the character of the assignment and the work done. Where more time is needed the student is given additional practice under trained supervision.

Open only to those who have a C average in all college work and a passing grade in the Fundamentals Test.

XVIII. Class Management

CORBETT

A discussion of the problems arising in connection with schoolroom discipline; methods of securing a wholesome school "spirit" and the application of civic principles to school life.

Two units; one semester.

XX. Educational Psychology

This is a study of the learning process and includes such topics as laws and types of learning, curves of learning and of forgetting, economy of learning, amount, rate and limits of improvement, spread of improvement or transfer and experimental studies in learning. Prerequisite: Psychology 2A and 2C.

Two credits.

THE STATUTORY CURRICULUM

(Elementary School)

NOTE.—The courses listed under this head do not include reviews of elementary school subject matter. They are professional courses, and presuppose a reasonable mastery of the materials of the elementary school curriculum and of the general curriculum of the secondary school.

Language

This course includes a study of the psychology and hygiene of reading, with a study of methods and materials suitable for the equipment of the elementary school teacher, and with a study, also, of the teaching of writing and spelling.

Two units; one semester.

XII. Mathematics

RICHARDS

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics, together with study and observation of the newer methods as used under ordinary classroom conditions.

Two units; either semester.

XIII. Introduction to Geography.

CLARK

This course includes a study of the fundamental principles of Geography and their adaptation to teaching Geography in the elementary schools.

Two units; one semester.

XIV. Children's Literature

CORBETT

This is a detailed study of the literature for children as a basis for the appreciation, selection and presentation of suitable material for the elementary school grades. It includes practice in story-telling and dramatization.

Two units; either semester.

XV. History

PEER

A course in the development of civilization beginning with ancient times, stressing the characteristics of successive periods and building a cultural background for the history of the elementary school.

Two units; one semester.

XVI. Music Coach

D. SMITH

A course in the rudiments of music and in elementary theory; study of major and minor scales (three forms), intervals, correct notation, music terminology and sight singing in one, two and three parts. Advanced students are excused from this course by special examination.

No credit; either semester.

XVII. Music in the Elementary School

D. SMITH

Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing, and part singing. Conducting. Prerequisite: Music XVI or its equivalent.

Two units; either semester.

XVIII. Art Coach

BENTON, RANKIN

Study of fine examples of painting, architecture, sculpture and handicraft. Problems are intended to give a practical working knowledge of design and color theory.

No credit; either semester.

XIX. Art in the Elementary School

BENTON

Prerequisite: Art I or its equivalent. This course is a practical application of the elements and principles of Art to problems for grades 1-6. It is presented through lectures, reports, demonstration lessons and laboratory work.

Two units; either semester.

XX. Natural Science in the Elementary School

SKILLIN

The course aims to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades).

Two units; either semester.

XXII. Geography Materials for the Elementary School

CLARK

This course aims to familiarize students with geography texts, geographical readers and other supplementary books, magazines valuable in the work, the different kinds of wall and desk maps, and also with concrete geographical materials such as pictures and exhibits. Prerequisite: Geography 1 or 1A.

Two units; second semester.

XXVI. Home Floriculture

SKILLIN

A study of ornamental gardening to familiarize students with material used in gardening and methods of propagation. A part of the work consists in lath work practice and visits to nurseries, green houses and florists. The course is especially

signed to furnish a part of the equipment needed by those intending to teach pure study and general science.

Two units; either semester.

I. Elementary Industrial Arts

BENTON

Practical problems in the handling of industrial materials adapted to the grades, such as clay modeling and pottery, paper making, bookbinding, weaving, basketry, etc. Also the study of related subject matter and methods.

Three units; either semester.

COURSES FOR SECONDARY SCHOOL TEACHERS IN THE JUNIOR HIGH SCHOOL FIELD

Organization and Administration (see Education CIII, CIX and CX)

I. English

BAGLEY

This course consists of the following items: (a) Lectures and required papers on the objectives of secondary school work in English and on these selection and interpretation of materials; (b) of the study of methods with respect to pupil abilities and activities; (c) of observation of the work in the city schools.

Two units; one semester.

II. Mathematics

RICHARDS

The subject matter, management of it and methods of teaching it in a junior high school curriculum in general mathematics, make up the principal topics of this course. Specific problems discovered include the application of arithmetic in current social and business life, intuitive geometry, graphic representation and the phases of algebra suitable to the junior high school pupil, together with the problem of making work useful in preparation for senior high school mathematics.

Two units; one semester.

III. Geography

CLARK

This course deals, first, with the subject matter suitable for secondary schools, especially the junior high school, and with the arrangement and interpretation of subject matter; second, with the problems of teaching geography in the junior high school grades. Lectures, papers, readings and observations are included.

Two units; one semester.

IV. Social Science

NIDA

This course for prospective junior high school teachers attempts to meet the demand of the teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography and civics. Methods of securing direct experience and training in suitable school and other survey and study projects, and of developing a keen and continuing interest in social and civic problems through observation and discussion, will be discussed and illustrated.

Two units; one semester.

V. History

LEONARD, LESLEY

A study of subject matter, organization, materials and methods for the teaching of history in the junior high school. The course includes a study of text books, maps, references and other material.

Two units; one semester.

VI. Art in the Junior High School

BENTON

Prerequisite: XVIII and XIX. This course is for third year Art students working for the Special Art Certificate of Elementary and Junior High School grade.

A-B-C-D. The Teaching of Science in the Junior High School

A course in the content, methods, field work, textbooks, laboratory work, equipment and reference readings for Junior High School Science. Prerequisite: 18 units of college science.

XXX. A. Prerequisite: 18 units of college science including Biology 10A-10B and Chemistry 1A-1B.

One unit, nine weeks (first quarter).

JOHNSON

XXX. B. Prerequisite: 18 units of college science including Biology 10A-10B and Chemistry 2A-2B.

One unit, nine weeks (second quarter).

COY

CXX. C. Prerequisite: 18 units of college science including Physics 2A-2B equivalent.

One unit, nine weeks (third quarter).

BAI

CXX. D. Prerequisite: 18 units of college science including high school or college Chemistry.

One unit, nine weeks (fourth quarter).

SKILL

CXXIV. Romance Languages

Brov

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish the different methods; their history and value.

Two units; one semester.

CXXV. Physiology

A study of the human body. Lectures and laboratory exercises on the physiology of the several systems of organs with emphasis on the applications to hygiene and physical education. A brief survey of human histology and a vertebrate section furnish the necessary facts of structure. Prerequisite: Junior standing.

Two lectures and two three-hour laboratory periods per week.

Four units; first semester.

PHYSICAL EDUCATION FOR TEACHERS

TAN

LI. Child Hygiene

A course for professional students which includes:

The influencing factors of environment; prenatal and postnatal development glands and internal secretion, their influences and reactions; growth periods, diseases, physical defects and health indices of school children; teaching of hygiene in the elementary school. Lectures, demonstrations, reports and discussions.

Two units; either semester.

LII. Play Activities

TAN

The required Physical Education for the second semester consists of intensive playing of a large range of games. The course does not deal with highly specialized athletics.

Note books are required in order that the student teachers may be provided with tested game material.

One-half unit; either semester.

LIII. Administration of Physical Education Program in Elementary and Junior High Schools

TAN

Materials and methods noted in the state program of Physical Education studied. Emphasis is placed upon athletic tests, group activities under student leadership, the administration of the "relief" and play periods and the means of securing better postures. Standards and practices in health measurements applicable to elementary school children, and the treatment of school emergencies included. Lectures, demonstrations and individual study of important problems.

Two units; either semester.

CL. Methods in Formal Activities

TANNER, C.E. PETER

(For Elementary and Junior High Schools.)

(a) A systematic study of the principles and technique of teaching physical training activities.

(b) A study of the selection, classification, arrangement and progression of formal activities. The responsibility of the physical instructor toward the problem of age, growth, and sex variations as affected by exercise is stressed.

One unit; one semester.

For descriptions of the courses in Biology, Physiology, Hygiene, etc., required for special certification in Physical Education, see those subjects in the list of general collegiate courses.

CLII. Theory of Teaching and Leadership in Physical Education

TAN

A consideration of the elements and the teaching process in Physical Education the application of Psychology to leadership; the physical, mental and social equipment of the successful physical instructor.

One unit; one semester.

III. Methods in Play Activities

C. E. PETERSON

Methods and materials used in intra- and inter-class games, with special reference to mass competition. Problems of classification, selection, organization and management of inter-school contests and relations. Discussion of honor societies, prizes, awards and sportsmanship code.

Three units; one semester.

IV. Administration of Physical Education Program in Secondary Schools

PETERSON

A study of interclass and intramural activities, with marked attention to methods of competition; consideration of games and sports (not specialized athletics) suited to the interest and physical needs of high school pupils; the relation of the instructor to Physical Education to the moral, social and hygienic problems of the high school.

Two units; one semester.

V. Practice Teaching in Physical Education

TANNER, PETERSON

Skill in teaching games, athletic sports, in the use of Decathlon Events and in gymnastic drills is expected. Training School and College classes are required in Practice Teaching. Prerequisites: Theory of Teaching and Leadership, a course in the Organization of Physical Education Program for the school group to be taught and a course in Games.

Five units.

VI. Methods in Coaching Competitive Athletics.

PETERSON

The presentation of different systems of teaching competitive athletics in high schools. This course will parallel the major sport in season and time will be spent on both the theory and practice of the most successful systems.

Two units; both semesters.

ENGINEERING

Mechanical Drawing

DE SILVA

This course is designed to train students in lettering and in neatness and accuracy in the use of instruments. Geometric problems, shop problems, theoretical problems with developments, warped surfaces with developments and penetration of prisms, pyramid and prism, cylinder and prism, cone and cylinder, and other similar problems are studied. Mechanical Drawing C is substantially equivalent to high school course in Mechanical Drawing.

Three units; either semester.

Descriptive Geometry

STOVALL

In this course 21 or more plates are required and four examinations given. The student deals with the customary problems of points, lines, planes, perpendiculars, angles, distances, angles, solids, developments, warped surfaces, intersections, etc. The aim of the course is to create originality, and to develop the ability of the student to visualize and present on paper problems which are theoretical or practical. Prerequisite: Mechanical Drawing C or the high school course in Mechanical Drawing.

Three units; either semester.

Machine Drawing and Design

STOVALL

Function of machines; motion, force, and work in machines; analysis of mechanism; velocity, acceleration, and effort diagrams; parallel motions, cams; ratchets; geared wheels; valve gear and design. Three lectures and two drafting periods. Prerequisite: Descriptive Geometry 3D.

Five units; second semester.

3. Plane Surveying

McINTYRE

Use and adjustment of surveying instruments, computations and map-making, together with a study of land, topographic, city and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisites: Trigonometry and Mechanical Drawing.

Three units; both semesters.

3. Pattern Making

SCUDDER

The aim of this course is to acquaint the student with as wide variety of patterns as possible, in order to develop his knowledge of construction and broaden his view of the industries. Instruction is given in the principles of pattern construction and the uses of the shrink rule, the finish allowance, draft allowance, fillet, etc. The correctness of design and necessity for the various allowances are proved by

actual moulds and castings made from one-piece and split patterns. Excursions pattern shops and foundries. Laboratory plan.

Two units; both semesters.

1A. Applied Mechanics

Problems concerning the action of external forces on rigid bodies; composition and resolution of forces; equilibrium; rectilinear and curvilinear motion; acceleration, linear and angular; harmonic motion; translation and rotation; moment of inertia; kinetic and potential energy; work, power, friction; machines; efficiency. Prerequisites: Mathematics 3A-3B and Physics 1A-1B.

Three units; first semester.

1. Elements of Electrical Engineering

A general survey of the field of Electrical Engineering. Single and polyphase circuits, power-factor, reactance, generators, motors, transformers, and transmission of power. Prerequisites: Mathematics 3A-3B and Physics 1C.

Three units; second semester.

ENGLISH

The major in English (lower division): English 1A-1B, and six units from 56A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

The major (junior year): A minimum of six units of upper division English including English 117.

1A-1B. English Composition

The purpose of this course is to develop precision and directness in speaking and writing. A study of models, chosen from modern literature, forms the basis of discussion and presentation. In 1A the emphasis is on exposition; in 1B on argumentation, description, and narration. Open only to students who have passed English A examination.

Three units; both semesters.

4. Great Books

A survey of books and bodies of literature that are primary sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic, Norse Edda, etc., and highly significant masterpieces in poetry and prose fiction. Lectures and required reading.

Three units; first semester.

52A-52B. Types of Literature

Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems.

Three units; first semester.

Introduction to the study of dramatic poetry and prose, the essay, novel, short-story: elements, principles and characteristics; examples.

Three units; second semester.

56A-56B. Survey of English Literature

The aim of this course is to give the student a better acquaintance with examples of English Literature which reveal the development of thought and ideals from the Anglo-Saxon period to the middle of the nineteenth century. The work consists of readings in the masterpieces, class discussions, occasional quizzes and written reports.

Three units; both semesters.

60. Periodical Literature

A study of current literature, in content and form, as presented by literary periodicals, with the purpose of promoting intelligence and discrimination in dealing with immediate interest. Discussions and written papers dealing with contemporary essays, fiction and poetry.

Three units; either semester.

101. Modern Prose Fiction

A study of recent and contemporary fiction in drama, novel, and short-story, beginning with Meredith and including the best British and American fiction today.

Three units; second semester.

Advanced English Composition

F. L. SMITH

A laboratory course in modern writing, with the purpose of developing style strength in the composition. A variety of prose forms (excluding the novel) some poetry considered; student may choose one or two forms for intensive tice. Outside readings. Prerequisite: One year of college composition.

Three units; first semester.

Shakespeare

OUTCALT

Extensive reading of Shakespeare's plays, with special attention to a select p of the comedies and another of the tragedies. Lectures and special reports.

Three units; first semester.

Browning and his Contemporaries

OUTCALT

A study of Tennyson and Browning and their contemporaries and successors, ing English poetry to nineteenth century life and thought.

Three units; second semester. (Not offered in 1927-28.)

-130B. American Literature

OUTCALT

A survey of American literature and its backgrounds from 1607 to the Civil War.

Three units; first semester.

Recent American literature, with its backgrounds, from the Civil War to the nt time, giving special attention to the development of prose fiction in the l, short story and drama.

Three units; second semester.

JOURNALISM.

The major in Journalism (lower division): History 4A-4B or 8A-8B, Political ice 1A-1B, English 52A-52B or 56A-56B, Typewriting 2A, Economics 1A-1B, hology 2A-2B, Journalism 51A, 51B. Recommended: Social 50, Anthropology B, English 4, 60, Music 3A-3B or Art 1A-1B, Commercial Law 18A-18B.

The aim of the course in Journalism is twofold: (1) to provide studies in the departments of instruction—English, History, Economics, and Political Science—a constitute a foundation essential to the successful pursuit of Journalism as a ssion; (2) to offer introductory courses in the principles and practice of Jour- m, supplemented by lectures of specialists in the field and by practical work in gathering and writing for student publications and for the local daily press.

News Gathering and Reporting

F. L. SMITH

Study of news sources and practice in news writing. Newspaper organization.

Three units; first semester.

News Editing and Correspondence

F. L. SMITH

Practice in copy-reading. Study of news values and types of newspaper stories.

Three units; second semester.

SPEECH ARTS.

e major in Speech Arts (lower division): Public Speaking 1A-1B, Public king 3A and 5A, or Public Speaking 55A-55B.

B. Elements of Public Speaking

WALKER

Training in fundamental processes of oral expression; methods of obtaining organizing material; outlining; principles of attention and delivery; extem- eous speaking and open forum debating; practice in construction and delivery pe forms of speech.

Three units; both semesters.

Advanced Public Speaking

WALKER

Survey of public speaking methods. Study of selections; observation of speak- a community. Organization and delivery of speeches. Analysis of individual ems in speech making. Participation in a public debate or oratorical contest, e presentation of an equivalent amount of practical speaking before public bilities is required.

The membership of the class is limited to twenty.

Before electing the course students must consult the instructor in charge.

Two units; second semester.

5A. Argumentation and Debate

WALKE

A study of the obtaining and organizing of evidence and the construction and use of the brief; study and discussion of current issues; the presentation of formal and informal debates. Attention will be given to intramural and intercollegiate debating.

Three units; first semester.

55A-55B. Play Production

JON

Study of its history and technique. Practical training in acting and producing. Public presentation of plays worked out in class. Limited to thirty students.

Three units; both semesters.

55C-55D. Dramatic Workshop

JONE

The making of plays. Students specialize creatively along lines of the individual dramatic interest including presentation of original and standard play. Limited to twenty advanced students.

Three units; both semesters.

FINE ARTS

The major in Fine Arts (lower division): Art A, 1A-1B, 6A-6B, 12.
The major (junior year): Art 115A-115B.

A-B. Freehand Drawing and Sketching

BENTO

Freehand drawing from objects and figure. Perspective, memory drawing and outdoor sketching. Mediums are charcoal, pencil, pen and ink and water color.

Two units; throughout the year.

1A. Art History and Appreciation

POLAND, MORRIS

A study of architecture, sculpture, painting and handicraft from the dawn of art to the Renaissance, through illustrated lectures, research and discussion.

Two units; first semester.

1B. Art History and Appreciation

POLAND, MORRIS

Same procedure as 1A but covering that period from the Renaissance to the Modern School.

Two units; second semester.

6A-6B. Art Structure

BENTON, RANKIN

Theory of design and color. Study of fine examples of painting and architectural sculpture and handicrafts. The problems are intended to give a practical working knowledge of design and color.

Two units; both semesters.

12A. Advanced Design

BENTO

Problems in creative design and processes of application through batik, block printing etc. Prerequisite: 6A-6B.

Two units; first semester.

12B. Lettering and Posters

RANKIN

Designing in relation to lettering, illumination and posters. Lettering for prearchitecture students included when desired. Prerequisite: 6A.

Two units; second semester.

52. Stage Design

BENTO

Theory of line, color and lighting for stage effects. Make-up and materials for stage use. Miniature stages are used for individual problems and the design and making of costumes and settings for some college production is the final problem. History of the development of settings leading to the art direction of today. Prerequisite: 6A.

Three units; second semester.

94A. Costume Design

RANKIN

Design studied in relation to modern dress for general and individual types. The course includes study of foreign and historic influences on dress; original problems; sketching from costumes in the shops and demonstrations with models. Prerequisite: 6A.

Two units; first semester.

History of Costume and Advanced Costume Design RANKIN
This course is for students working towards special art or home economics
ificates of secondary grade. Prerequisite: 94A.
Two units; second semester. (Not given in 1927-28.)

Home Decoration BENTON
Design in relation to the home. House planning and landscaping, interior
ation, study of period furnishing and furniture and their influence today,
ugh illustrated lectures, research and original problems. Prerequisite: 6A.
Three units; first semester.

Home Decoration BENTON
Takes up more intensive study of period styles and historic ornament. Original
lems in designing furniture and fire places, and in selecting and combining
ires. Prerequisite: 95A.
Two units; second semester. (Not offered in 1927-28.)

-115B. Life Drawing and Painting BENTON, RANKIN
115A—Pose drawing from the figure.
115B—Illustration.
Prerequisite: Art A-B.
Two units; both semesters. (Not offered in 1927-28.)

TEACHER-TRAINING COURSES.

See Education: XVIII; Art Coach, XIX; Art in the Elementary School, CXIX;
n the Junior High School, LXI; Elementary Industrial Arts.

FOREIGN LANGUAGE

The major in a Foreign Language (lower division): Required: 16 units of credit
e language chosen for the major. Recommended: History 4A-4B.
The major (junior year): A minimum of six units of upper division in the
gn Language chosen for the major.

Elementary German
Pronunciation, reading and grammar, with practice in simple conversation,
tion, and description, both oral and written.

Elementary German HEIMERS
Five units; first semester.

Elementary German HEIMERS
Prerequisite: German A or two years of the high school course in German, or
ivalent.
Five units; second semester.

Intermediate and Scientific German
This course furnishes the regular preparation for the upper division courses.

Intermediate and Scientific German HEIMERS
This course may be taken as a three-unit course in literature or as a five-unit
e combining literature and science. Prerequisite: German B with a grade of C
ee years of High School German.
Three or five units; first semester.

Intermediate and Scientific German HEIMERS
econd semester; same as C. Prerequisite: German C with a grade of C or
ears of High School German.
Three to five units; second semester.

Elementary French
Intensive study of French Grammar and Syntax; daily written work discussed
ss; class drill in conversational idiom and pronunciation; reading with oral
sion and résumés; dictation; introduction to contemporary prose writers; study
principles of French Prosody, with memory work.

Elementary French HEIMERS, E. BROWN
Five units; first semester.

B. Elementary French

HEIMERS, E. BROW

Prerequisite: French A or two years of the high school course in French, or its equivalent.

Five units; second semester.

Intermediate French

Reading and composition; study of standard prose as a basis for class work; collateral reading with résumés and written reports in French; study of French Prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences.

C. Intermediate French

L. P. BROWN, E. BROW

Prerequisite: French B or three years of the high school course in French, or its equivalent.

Three units; first semester.

D. Intermediate French

L. P. BROWN, E. BROW

Prerequisite: French C or four years of the high school course in French, or equivalent.

SC. French

HEIM

Scientific French. Prerequisites: French B or three years of high school French. Two units; first semester.

SD. French

HEIM

Scientific French. Prerequisite: French C or four years of high school French. Two units; second semester.

102A-102B. Introduction to French Classics

BRO

Prerequisite: French D or its equivalent.

Three units; both semesters. (Not offered in 1927-28.)

105A-105B. Modern French Drama

E. BROW

Plays of Musset, Scutere, Angier, Dumas fils, Pailleron, Brieux, Hervieux, Mailland, Rostand and others will be read and discussed as to subject matter and technique. Outside reading and reports.

Prerequisite: French D, or consent of instructor.

Three units; both semesters.

Elementary Spanish

Intensive study of Spanish grammar and syntax, with daily written work; drill in conversational idiom and pronunciation; reading with oral discussion of résumés; dictation; introduction to contemporary prose writers; study of the principles of Spanish prosody, with memory work.

A. Elementary Spanish

L. P. BROW

Five units; first semester.

B. Elementary Spanish

L. P. BROW

Prerequisite: Spanish A or two years of the high school course in Spanish, or its equivalent.

Five units; second semester.

Intermediate Spanish

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; a study of Spanish prosody, with selections for memorizing; dictation. Class work conducted mainly in Spanish. Individual conferences.

C. Intermediate Spanish

Prerequisite: Spanish B or three years of the high school course in Spanish, or its equivalent.

Three units; first semester.

D. Intermediate Spanish

Prerequisite: Spanish C or four years of the high school course in Spanish, or its equivalent.

Three units; second semester.

-102B. Introduction to Spanish Classics

L. P. BROWN

This course will introduce the student to the several types of classical literature. The material will be: Gil Blas, and other novels of Riquelme; one drama each from the works of Lope de Vega, Calderon, Alarcon, and Moreto; selections from Don Quixote, and the Cien Mejores Poesias Castellanas; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor. Three units; both semesters. (Not offered in 1927-28.)

-105B. Modern Spanish Drama

L. P. BROWN

This course will trace the development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor. Three units; both semesters.

-110B. Novel and Short Story in Spain

L. P. BROWN

This course will trace the development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor. Three units; both semesters. (Not offered in 1927-28.)

GEOGRAPHY

The major in Geography (lower division): Geography 1 or 1A, 2 or 2A, and 3. Recommended: Geology 1A.

The major (junior year); a minimum of six units of upper division work in Geography.

Introduction to Geography; Elements

CLARK, SUHL

This course deals with the fundamental principles of geography, with the distribution of life upon the earth and with the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and location are related to human activities. Open to all students.

Geography 1, three units; either semester.

Geography 1A, two units; either semester.

Introduction to Geography; Natural Regions and the Distribution of Population and of Cultures

CLARK, SUHL

This course applies the fundamental principles of geography to the various regions of the world. The regions are compared with regard to different stages of development. Prerequisite: Geography 1 or 1A.

Geography 2, three units; either semester.

Geography 2A, two units; either semester.

Elementary Meteorology

BLAKE

An elementary study of the earth's atmosphere and changes in it which produce weather and influence human affairs. Special attention will be given to local conditions, instruments and records.

Two units.

Advanced Meteorology

BLAKE

A continuation of Meteorology 3. In addition, this course discusses cyclones and anticyclones, their causes, paths and life histories. Weather maps will be made and analyses given on forecasting, applied meteorology and recent developments in precipitation. Prerequisite: Meteorology 3.

Two units.

Climatology

BLAKE

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention is given to the climate of different parts of the United States. Prerequisite: Meteorology 3.

Two units.

Geography of Europe

CLARK

This course deals with the physical environment of each of the nations and their relations to physical environment in their political and social relations. It is planned to be of value to all students who wish to familiarize themselves sufficiently with the geography of Europe to be able to read current periodical literature with interest and understanding. The course introduces the students to the smaller as well as the larger of the European countries. Prerequisite: Geography 1 or 1A.

Three units; second semester.

116D. Geography of South America

This course deals with the climate, topography and natural resources of South American countries, and with the effect of those physical factors upon economic, commercial and racial problems of the different nations. Prerequisite: Geography 1 or 1A.

Three units.

121. Geography of North America

A study of the natural regions of North America, their formation, occupation and historical development. Prerequisite: Geography 1 or 1A.

Three units; first semester.

124. Geography of Asia

A study of the cultural regions of Asia, their physical environment and historical development. Prerequisite: Geography 1 or 1A.

Three units; second semester.

141. Economic Geography

A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 or 1A and 11 or 11A.

Three units; first semester.

Geology 1A

General geology. A study of the surface features of the earth, agencies and processes of change and evolution of topographic forms.

Three units; first semester.

Geology 1B

Historical geology. Origin and geological history of the earth and of its animal and plant life. Prerequisite: Geology 1A.

Three units; second semester.

HISTORY.

The major in History (lower division): History 4A-4B or 8A-8B or 5A and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2.

Students who have not had at least two years of European history in the school must take History 4A-4B or 5A-5B.

The major (junior year): A minimum of six units of upper division world history.

4A-4B. History of Modern Europe

Development of Western European society, politics and institutions from 1500 A.D. to the present time. The first half-year's work extends to the Congress of Vienna.

Three units; both semesters.

8A-8B. History of the Americas

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis is placed on the planting of European civilization in the western hemisphere, the international contest for the continents, the war of independence, the development of the American republics, and their relations one another and with the rest of the world. The course is based on H. E. Bourdette's "Syllabus of the History of the Americas."

Three units; both semesters.

5A-5B. History of England

A survey of the more important political, constitutional and cultural phases of English development. The course is advised as a preliminary study for students of American history and government.

Three units; both semesters.

171A-171B. History of the United States

A general course dealing, in the first semester, with English colonization of North America and the development of colonial institutions, and, in the second semester, with the political history of the United States.

Three units; both semesters.

1A-151B. Diplomatic History of Europe

LESLEY

A detailed study of the basic factors of international organization and procedure, of European diplomatic and colonial policies. During the second semester special phasis is placed on the period, 1880-1926.

Three units; both semesters.

HOME ECONOMICS

HOUSEHOLD ART

The major in Household Art (lower division) required: High school courses in Art and Chemistry or equivalents; Household Art 1A-1B; Art 6A-6B; History 4B or equivalents. Recommended: Economics 1A-1B, Art 12, Psychology 12B, French or German; high school courses in Clothing, Freehand and Mechanical Drawing. History 4A-4B is not required of students who present credit for two years of high school History.

Clothing

LANDERS

A study of clothing problems. The hygiene, artistic and economic aspects of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: One year of high school Sewing or equivalent, Art 6A. Art 6A may be taken concurrently with this course.

Three units; first semester.

Clothing and Costume Design, Textiles

LANDERS

A study of costume design with lectures on artistic appreciation, color and materials. Textile study includes a survey of textile fabrics, chemical and physical properties. Application of principles to the selection and construction of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: Clothing or equivalent, high school Chemistry or Chemistry 1A, Art 6B. Art 6B may be taken concurrently with this course.

Three units; second semester.

Home Making

COLDWELL

A general view of the place of the home in society. Administration of the household. Budgeting of incomes to cover shelter, food, clothing, savings and social life. Field work, assigned reading and theme writing required. Lectures, class discussion, recitations.

Two units; either semester.

Home Accounting

COLDWELL

Basic principles of administering household finances. Budgeting the moderate income; keeping accounts; banking methods; home management. Saving and investing.

Two units; second semester.

Millinery

LANDERS

Making of hats, frames, trimmings, etc. Application of principle of design. Prerequisite: Art 6A. Art 6A may be taken concurrently with this course. Recommended: Art 6B.

Two units; first semester.

HOUSEHOLD SCIENCE

The major in Household Science (lower division): Household Science 1A-1B, Chemistry 1A-1B, 8, Bacteriology 1, Economics 1A-1B.

Food Economics

LANDERS

Principles of selecting and preparing foods. A study of composition, production, preservation, nutrition value, digestibility, flavor and cost of foods. One lecture or recitation and two laboratory periods per week. Prerequisites: One year of high school Cooking or equivalent, Chemistry 1A. Chemistry 1A may be taken concurrently with this course.

Three units; first semester.

Food Economics

LANDERS

Principles of diet applied to individual family and special group. The planning and serving of meals. One lecture or recitation and two laboratory periods per week. Prerequisites: Food Economics 1A or one year of high school Cooking, high school Chemistry or Chemistry 1A.

Three units; second semester.

2. Dietetics

An analysis of food with special reference to needs of special group. Prerequisites: Food Economics 1A-1B, Chemistry 1A-1B, Organic Chemistry 8 (to be taken concurrently with this course), Bacteriology 1.

Two units; second semester.

HYGIENE

C. E. PETER

1. Hygiene and First Aid

An informational course in personal and community Hygiene required of all in the freshman year taking work in the Liberal Arts curricula. The course includes a study of Sex Hygiene and of the Hygienic Principles of Exercise, Bathing, Sleep. Civic Hygiene is vitalized through investigations by each student of special topics, the means by which the health of the local community is protected and improved, providing subjects for special study. Lectures, reference reading, special topics, discussions, oral and written quiz.

One unit; either semester.

2. Hygiene and First Aid

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social Hygiene is studied in its relation to the practical problems of young women and prospective home makers. Laws and procedure in local civic health matters of particular interest to women are studied in detail. Reports following personal investigation of at least three matters are required for each member, these reports being given and discussed before the class. Required of all women in the freshman year taking work in the Liberal Arts curricula.

Two units; either semester.

INDUSTRIAL ARTS

A special junior high credential in Shopwork may be obtained as well as general junior high degree in four years attendance if electives are carefully chosen. Requirements for a teaching credential in occupations and Home Mechanics see page 47.

1A. Woodwork (Benchwork in Wood)

Five hours per week.

Two units; first semester.

1B. Woodwork

Prerequisite: 1A five hours.

Two units; second semester.

2. Painting and Finishing

Prerequisite: 1A-1B. Five hours per week.

Two units; second semester.

3. Mechanical Drawing

Nine hours per week.

Three units; either semester.

4. Wood Turning

Prerequisite: 1A-1B, 2, 2. Five hours.

Three units; first semester.

5. Cabinet Work

Prerequisite: 1A-1B, 2, 4. Nine hours per week.

Three units; second semester.

6. Upholstering

Prerequisite: 1A-1B, 2, 3. Five hours per week.

Two units; second semester.

7. Concrete Work

Five hours per week.

Two units; first semester.

8A. Pattern Making

Five hours per week.

Two units; first semester.

Pattern Making Prerequisite: 8A. Five hours per week. Two units; second semester.	SCUDDER
Sheet Metal Prerequisite: 3. Five hours per week. Two units; second semester.	DESILVA
Pipe Fitting Nine weeks. Five hours per week. One unit; second semester.	DESILVA
Linear and Shadow Perspective Prerequisite: 3. Nine weeks. One unit; second semester. Five hours per week.	DESILVA
Machine Drawing Prerequisite: 3. Nine hours per week. Three units; first semester.	STOVALL
Automobile Mechanics Ten hours per week. Four units; first semester.	DESILVA

TEACHER-TRAINING COURSES

Organization Prerequisite: Thirty units in Industrial Arts. Two hours per week. Two units; second semester.	SCUDDER
Teaching Prerequisite: Thirty units in Industrial Arts. Five hours per week. Five units; either semester.	SCUDDER

MATHEMATICS

The major in Mathematics (lower division) required: Mathematics 3A-3B, 4B and 6. Recommended: Physics 2A-2B or 1A-1B and a reading knowledge French and German.

The major (junior year): Mathematics 101 and 112.

Intermediate Algebra Functions and graphs, theory of quadratic equations, binomial theorem, logarithms, progressions. Prerequisite: One and one-half years of high school Algebra. Two units; second semester.	LIVINGSTON
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Plane Trigonometry Logarithms, solution of triangles, trigonometric functions and relations, polar coordinates. Prerequisite: Mathematics A. Two units; first semester.	LIVINGSTON
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Survey Course Trigonometry, functions and graphs, differential and integral calculus. Prerequisite: One and one-half years of high school Algebra. Not open to those taking 3A. Three units; first semester. (Not offered in 1927-28.)	
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Mathematics of Investment Interest and annuities; amortization; sinking funds; valuation of bonds, depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Two years of high school Algebra and Trigonometry or Mathematics A. Three units; second semester.	WRIGHT
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3A-3B. Introduction to Analysis

LIVINGSTON

Functions and graphs, analytic geometry, differential and integral calculus. Prerequisite: Mathematics C. The high school course in Solid Geometry is strongly recommended.

Three units; both semesters.

4A-4B. Higher Analysis

LIVINGSTON

Integration, series, differential equations, curves and surfaces. Prerequisite: Mathematics 3A-3B.

Three units; both semesters.

6. Introduction to Projective Geometry

LIVINGSTON

The construction and study of conic sections by means of perspectives, poles and polars, involutions and inversions. Prerequisite: Mathematics C or 1.

Three units; second semester.

101. Elementary Geometry for Advanced Students

LIVINGSTON

Geometric constructions, properties of triangles, harmonic properties of circles. Prerequisites: Mathematics 3A-3B and 6.

Three units; first semester.

112. Analytic Geometry of Space

LIVINGSTON

Prerequisites: Mathematics 4A-4B and 6, except that one of these may be taken concurrently.

Three units; second semester.

MUSIC

The major in Music (lower division) : Music 1A-1B, 3A-3B, 4A-4B and 5A-5B.
The major (junior year) : Music 109A-109B.

1A-1B. Musicianship

A course combining the elements of ear training, sight reading, dictation and music writing. Prerequisite: Knowledge of characters used in notation.

Two units; both semesters.

3A-3B. History and Appreciation of Music

L. D. SMITH

Development of primitive systems; mediæval music; the school of counterpoint; history of oratorio and opera; the rise of classic forms. A study of the works of the composers of the classic and romantic periods. Illustrations, lectures and reports.

Two units; both semesters.

4A-4B. Harmony

L. D. SMITH

Scale construction, intervals, chords, structure, modulation, through various types of seventh chord. Especial attention is paid to the keyboard application of problems in harmonization, transposition, and modulation.

Three units; both semesters.

5A-5B. Counterpoint

A study of simple counterpoint in the five species. Two and three part inventions. Prerequisite: Music 4A-4B.

Two units; both semesters. (Not offered in 1927-28.)

109A-109B. Conducting

(1) Voice classification, principles of vocal ensemble, beating time, interpretation, repertoire. (2) Instrumentation and principles of instrumental ensemble. Prerequisite: Music 4A-4B.

Two units; both semesters. (Not offered in 1927-28.)

118A-118B. Choral Music

Studies in choral music, breathing, enunciation, interpolation. Prerequisite: Music 1A-1B, or its equivalent.

Two units; both semesters. (Not offered in 1927-1928.)

118C-118D. Choral Music

Two units; both semesters.

MUSIC ORGANIZATIONS

The primary aims of the various music organizations are to give the students participating, and incidentally the entire college student body listening, an added for and knowledge of the best in choral and orchestral music. Added to this are cultural advantages to be gained, the ability to read and produce good music, and training in the necessary concentrating upon the wishes of a conductor, the which comes with appearing before public audiences, the promotion of college, the enriching of student and college activities, and the great pleasure and living effect of artistic expression through music.

, C, or D. Treble Clef Club L. D. SMITH
One-half unit; either semester.

, C, or D. Male Chorus L. D. SMITH
One-half unit; either semester.

, C, or D. Choral Club L. D. SMITH
One-half unit; either semester.

, C, or D. Orchestra
One unit; either semester.

TEACHER-TRAINING COURSES.

ee Education: XVI Music Coach; XVII Music in the Elementary School;
VII Music in the Secondary School.

PHYSICAL EDUCATION

he group major in Physical Education and Hygiene (lower division) required:
School Chemistry, Biology 10A-10B, Physiology CXXV, Economics 1A-1B,
Biology 2A-2B. Recommended: German or French, Public Speaking 1A-1B.

Physical Education for Men

C. E. PETERSON

Two-hour course required for the two years of lower division work. Physical education is given each student when entering and special attention is given to fixing postural faults. In addition to the body building work given in the classes, physical efficiency tests embracing agility, defense and swimming are given each semester. During the two years a playing knowledge of the major and minor is given and fundamentals of boxing and wrestling taught each student.

A, B, C or D. Physical Education. One-half unit; both semesters.

A or B. American Football. One-half unit; first semester.

A or B. Track. One-half unit; second semester.

A. Baseball. One-half unit; second semester.

A or B. Basketball. One-half unit; second semester.

A or B. Tennis. One-half unit; either semester.

A or B. Boxing. One-half unit; either semester.

A or B. Wrestling. One-half unit; either semester.

A, B, C or D. Swimming. One-half unit; either semester.

Physical Education for Women

TANNER, RAW

Students are given a health and physical examination, the physical activities being based upon the data thus obtained. Two hours weekly of directed physical training are required of all women students, the chief purpose being to give a knowledge of and interest in suitable sports and games, that habits of physical exercises may be promoted.

Extra-mural sports are encouraged, particularly those of inter-class nature.

A-52B. Physical Education. Prescribed courses for freshmen.

One-half unit; both semesters.

C-52D. Physical Education. Prescribed courses for sophomores.

One-half unit; both semesters.

First Aid and Bandaging

C. E. PETERSON

Proper care of injuries received on the playground and athletic field. Methods of bandaging and first principles of massage used in athletic training.

One unit; first semester.

TEACHER-TRAINING COURSES

Physical Education: LI Child Hygiene, LII Play Activities, LIII Administration of Physical Education Program, CL I Methods in Formal Activities, CLII Theory of Physical Education and Leadership in Physical Education, CLIII Methods in Play Activities, CLIV Administration of Physical Education Program in Secondary Schools, CLV Practice Teaching in Physical Education.

PHYSICS

The major in Physics (lower division) required: Physics 2A-2B and 3A-3B with a grade of B, or Physics 1A-1B and 1C-1D; Chemistry 1A-1B; Mathematics C, 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

1A-1B. General Physics

Mechanics, properties of matter, and heat. This course aims at a development of the fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. The work is presented in lecture, text assignments, problem sets and experimental laboratory work. Two lectures and one laboratory period each week. Prerequisites: high school physics or chemistry and trigonometry.

Three units; both semesters.

1C-1D. General Physics

This course is a continuation of Physics 1A-1B for students in the sophomore year, and includes magnetism, electricity, sound and light. Two lectures and one laboratory period each week.

Three units; both semesters.

2A-2B. General Physics

Properties of matter, mechanics, heat, sound, light, electricity and magnetism. A non-engineering course. Lectures, demonstrations and discussions. Prerequisites: high school mathematics.

Three units; both semesters.

3A-3B. Physical Measurements

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity and magnetism. These exercises are usually taken in conjunction with Physics 2A-2B.

Two units; either semester.

PHYSIOLOGY

See Education, Course CXXV.

POLITICAL SCIENCE

The major in Political Science (lower division): Political Science 1A-1B, Economics 1A-1B or History 4A-4B or Geography 1 and 2. High school Civics presupposed in the following courses.

The major (junior year): Political Science 111 and 113.

1A-1B. Comparative Government

A comparative study of typical European governments and the government of the United States. The first semester, England, France, Germany, Italy, Switzerland. The second semester, the lesser European states and the United States.

Three units; both semesters.

101. Constitution of the United States

This course is planned to meet the requirements of the state law for the education of teachers. The origins, principles and development of the Constitution.

Two units; either semesters.

111. Theory of the State

The nature of the state, its organization and activities, and its relation to individuals and to other states.

Three units; first semester.

113. American Political Ideals

Underlying theories and principles of American governmental policy.

Three units; second semester.

PSYCHOLOGY

The major in Psychology (lower division) required: Psychology 2A and 2B, Zoology 1A-1B, or Biology 10A-10B. Recommended: French, German, Chemistry.

The major (junior year): Elementary Statistics 140A (U. C. Ext. 140), Social Psychology 145, Zoology 114 and 115.

General Psychology (for Liberal Arts students)

BELL

An introductory survey of the entire field of psychology. In the study of normal human behavior, and the factors which condition it, a conservative position is taken, leaving the student as nearly as possible unbiased toward the special schools of psychology.

Three units; first semester.

General Psychology (for Education students)

BELL

An introductory survey of the entire field of psychology. The fundamental facts of human behavior and the facts conditioning it are given with special emphasis upon problems as original endowment, the learning process, work and fatigue and individual differences in their relation to education.

Three units; both semesters.

Applied Psychology

BELL

A general survey of the results of modern psychology applied to self-improvement, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in these fields between scientific, legitimate psychology and the pseudo-psychology that is popular because of its simplicity and plausibility or because of its mysticism.

Three units; second semester.

Genetic Psychology—Growth and Development of the Child

JOHNSON, BELL

A study of the mental and physical growth and development of the child. Special emphasis is given to norms of structure and function as a basis for an interpretation of variations from them. Behavior problems and the growth of personality traits and conditioning factors of physical and mental hygiene are also treated.

Three units; second semester.

Social Psychology

JOHNSON

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, the crowd, public opinion, social control, etc. Prerequisite: Psychology 2A.

Three units; second semester.

ZOOLOGY

The major in Zoology (lower division) required: Zoology 1A-1B and high school Chemistry or Chemistry 1A. Recommended: French, German and Botany 2A-2B, Chemistry 8-9.

The major (junior year): Zoology 100, 112, 114. Recommended: Chemistry 124, Botany 101.

Zoology

JOHNSON

An introduction to animal Biology dealing with structure, functions and evolution of animal life. The laboratory work supplements the lectures and is based on the study and observation of living and preserved material. The course will acquaint one with the fundamental facts and theories of Biology as they pertain to animal life. It is valuable to the general student as well as to the biology specialist. Three lectures and two three-hour laboratory periods per week.

Five units; first semester.

Zoology

JOHNSON

A continuation of 1A. The first half of the semester is given to the study of the structure and behavior of the chordates, with a detailed dissection and study of the chick. The second half is devoted to the study of the early development of the various types of animals, especially the chick. The course deals with the higher animals, the vertebrates, thus supplementing the work of the first semester. The detailed dissection of the shark and the careful study of the developing chick give the student a good basis for further work in medicine, agriculture, or zoology, and furnish as well a good biological background for students in any line of work. Three lectures or recitations and two three-hour laboratory periods per week.

Five units; second semester.

10B. Biology

JOHNSON

The fundamentals of plant and animal biology, with elementary work in physiology, evolution and eugenics. The laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic facts of biology. It is designed not only to give

the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures or recitations and one three-hour laboratory period per week.

Three units; both semesters.

100. Elementary Embryology

JOHNSON

The development of vertebrates as illustrated by the chick. Four hours per week of laboratory, lectures and recitation. Prerequisite: Zoology 1A-1B.

Two units; first semester.

112. Invertebrate Zoology

JOHNSON

Illustrated lectures deal with the more common animals that are to be found at nearby beaches. The life history, habits, and distribution of our more conspicuous shore animals are considered. Students will have the opportunity to get acquainted with the living animals both at the beach and in the laboratory. One hour lecture per week and trips to the beach as opportunity offers. Prerequisite: Biology 10A-101 or Zoology 1A.

Two units; first semester. (Not offered in 1927-28.)

114. Heredity and Evolution

A discussion of the facts of heredity, in plants, animals and man; the Mendelian law and its application; development of theories of evolution. Reports on assigned topics are required. The course is designed to make the student familiar with some of the current literature and opinions of scientists concerning heredity and evolution. Prerequisites: Biology 10A-10B or Zoology 1A-1B or Botany 2A-2B.

Three units; first semester. (Not offered in 1927-28.)

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San Diego State College

Announcement of Courses

1928-1929



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No. 2

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

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FACULTY

HARD L. HARDY, President. School Administration. B.L., University of Wisconsin; M.A., University of Chicago; Study of European secondary schools, 1898-1899; Principal San Diego High School, 1906-1910. (Appointed September 1, 1910.)

W. E. OUTCALT, Vice President and Professor of English. Student, University of Illinois; A.B., Stanford University; M.A., Stanford University; graduate student, Stanford University; Head Department of English, San Diego High School; travel in Europe, 1910-1911; research work, Stanford University, 1921-1922. (Appointed September 1, 1912.)

HUR G. PETERSON, Dean of Liberal Arts, ex officio in general charge of lower division studies. Economics and Sociology. A.B., College of the Pacific; M.A., Stanford University; Vice Principal San Diego High School and Director of Junior College, 1919, 1920, 1921. (Appointed September 1, 1921.)

WIS E. JOHNSON, Dean of Department of Education. Professor of Education. Graduate of State Normal School, St. Cloud, Minnesota; Ph.B., A.M., Illinois Wesleyan University; A.B., A.M., Ph.D., University of Minnesota; Sc.D., South Dakota State College; LL.D., Dakota Wesleyan University. Taught in rural, village and city schools, state normal school and university. President of State normal schools at Ellendale, North Dakota, and Aberdeen, South Dakota, and of South Dakota State College, Brookings. Member of staffs of the educational surveys of Virginia and Alabama. (Appointed April 1, 1924.)

ADA HUGHES COLDWELL, Dean of Women. Student Hopkins Art School, San Francisco; Special Study in Europe; Grade Teacher, Alameda, California, six years; Student California Medical College, San Francisco; Licensed Pharmacist, State of California; special study, Columbia University; Head of Home Economics Department, University of Montana, Summer Session, 1915. Appointed Head of Home Economics Department September, 1907; Appointed Dean of Women June, 1915.)

ELIA C. AMSDEN, Assistant Professor of Commerce. Gregg School, Chicago; special secretarial training in various institutions; University of California summer sessions and extension division work; Teacher in University of California summer school, 1918; traveling representative and secretary for the Federal Board for Vocational Education, France, World War; in charge of Geographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant editor and reporter, Ypsilanti, Michigan, Daily Press; Instructor, San Diego High School, 1909-1924. (Appointed September 1, 1925.)

W. M. ARNERICH, Assistant, Training School. A.B., State Teachers College, San Jose; professional study, Stanford University; Teacher, San Jose public schools two and one-half years. (Appointed September, 1926.)

W. A. FAULT, Principal of the Training School and Associate Professor of Education. Undergraduate work at Miami University and Valparaiso University, B.S. Graduate work at the University of Iowa and the University of South Dakota, M.A. Superintendent of city schools twelve years; conductor and instructor of teachers institutes; professor of Education at Southern State Teachers College, Springfield, South Dakota, 1922-1924. (Appointed September 1, 1925.)

W. G. BAGLEY, Assistant Professor of English. A.B., University of Michigan; M.A., University of California; graduate study, University of Illinois and Columbia University; Head Department of English, State Normal School, Ashkosh, Wisconsin; Instructor, San Diego Junior College, 1919-1921. (Appointed September 1, 1921.)

W. BAIRD, Associate Professor of Physics. A.B., University of Wisconsin; M.A., University of California; graduate study, University of Minnesota. (Appointed September 1, 1921.)

W. BEIDLEMAN, Assistant Professor of Music. B.S., Columbia University, 1914; M.M., Columbia, 1915. Teacher of music, Boys High School, Brooklyn, N. Y., 1916. Instructor, Columbia, 1917-1919; head of violin department, University of Illinois, 1920-1921; assistant professor of music, University of North Dakota, 1921-1924; professor of music and director of the Conservatory, College of the West, Tacoma, Washington, 1924-1927. Teacher of violin, organ, theory, and appreciation; chorus, orchestra, and band director; church organist and choir director since 1914, First Baptist Church, San Diego, 1928. (Appointed May, 1927.)

- MRS. GERTRUDE SUMPTION BELL, Associate Professor of Education. Tests Measurements. A.B., Indiana University; M.A., Stanford University; graduate Indiana State Normal School; research work, Clark University; Assistant Education and Director of Practice Teaching, University of Colorado; S. Institute Lecturer, Montana; Instructor, School of Education, Indiana University. (Appointed August 1, 1916.)
- MARY BENTON, Assistant Professor of Art. Student at Rosemont Dezailey, Yverdon, Switzerland; at Chicago Art Institute; at New York School of Art at Teachers College, Columbia University; pupil of W. J. Whittmore, miniature painter, and of Sara Butterworth, craftsman. (Appointed July 1, 1916.)
- ELIZABETH MCPIKE BROWN, Assistant Professor of French. Ph.B., M.A., Ph.D., University of Chicago; Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France; Certificat d'Etudes Françaises, University of Paris. Assistant Professor of French, University of Chicago, 1918-1920; summer quarter, 1922; Head of French Department, Rockford College, Rockford, Illinois; Instructor in French, University of California, Extension Division, San Diego. (Appointed September 1, 1926.)
- LESLIE P. BROWN, Associate Professor of Spanish. A.B., Yale University; M.A., Harvard University. Instructor in French and Spanish, Northwestern University, 1913-1915; Instructor in Harvard University, 1916-1917; Instructor in University of North Carolina, 1917-1918; Instructor in University of Chicago, 1918-1922. (Appointed July 1, 1922.)
- M. EUSTACE BROOM, Assistant Professor of Education. Student, University of Chicago. A.B. and M.A., University of Illinois. Assistant in Psychology, University of Illinois, one year; Teacher in Illinois high schools, two years; Superintendent of Schools, Illinois and West Virginia, three years; Instructor in Education, Extension Division, Concord State Normal School, West Virginia, one year; graduate student, University of Southern California; Teacher, Francis W. Parker School of San Diego, two and one-half years.; Assistant Editor, *The High School Teacher*. (Appointed February 1, 1928.)
- VINNIE B. CLARK, Assistant Professor of Geography. A.B., University of Wisconsin. Graduate student, University of Chicago; Assistant in Geography, University of Wisconsin; Oak Park, Ill., High School, 1913-1914; travel in Mexico and graduate study, University of Mexico, 1922; Summer Session Instructor, University of California, Southern Branch, 1923; travel in Europe, 1924. (Appointed September 1, 1914.)
- KATHERINE E. CORBETT, Training Supervisor and Assistant Professor of Education. B.Pd., Michigan State College; B.S. and A.M., Teachers College, Columbia University; graduate Public School Music course, Ypsilanti Conservatory of Music; Teacher in Public Schools, Ypsilanti; special teacher in American history courses; Training Supervisor, Kent State Normal College, Ohio. (Appointed July 1, 1921.)
- GEORGIA V. COY, Professor of Botany. Graduate San Diego Normal School; Teacher in San Diego County Schools, 1909-1910; B.S., Columbia University; Ph.D., University of Chicago; Bachelor's Training Diploma in Biology, Teachers College, Columbia University; graduate work at University of California, 1915. (Appointed September 1, 1912.)
- ALMYRA DAWSON, Assistant, Training School. A.B., San Diego State Teachers College. (Appointed September, 1925.)
- CLARENCE J. DU FOUR, Assistant Professor of History. B.L., University of Wisconsin; M.L., Ph.D., University of California; teacher, principal and superintendent of schools. (Appointed July 1, 1928; resigned January 1, 1928.)
- LESLIE S. EVERTS, Accounting. B.L., University of Wisconsin; C.P.A., California; Wisconsin; Public Accountant in Milwaukee, Wisconsin, and San Diego, California, 1909. (Appointed September 1, 1921.)
- WALDO H. FERGASON, Biology. B.A., St. Olaf College, Northfield, Minnesota. Teaching Fellow, 1923-1924; Diploma St. Olaf School of Music, 1925; Instructor in Music, Roosevelt Junior High School, San Diego, 1925-1926; graduate study, University of Southern California, summers of 1925 and 1926. (Appointed September 1, 1926.)
- WALLACE A. GILKEY, Assistant Professor of Chemistry. A.B. and C.E. (Civil Engineer) at Stanford University; graduate student, Stanford University; Instructor at Seale Military Academy, spring of 1922; employed two years in chemical engineering with the Santa Cruz Portland Cement Company, Cottrell Precipitation Plant; the American Smelting and Refining Company, laboratory chemist; and the Refinery of Standard Oil Company at El Segundo, California, as chemical engineer and petroleum inspector. (Appointed September 1, 1925.)

H. C. HAMMACK, Training Supervisor and Assistant Professor of Education, Graduate State Normal School of San Diego; B.A., State Teachers College of San Jose; professional study at University of California; Public School Teacher, five years. (Appointed February 1, 1911.)

ALICE LILI HEIMERS, German. Student at Universities of Bonn, Lausanne, Berlin (Ph.D. Berlin). Postgraduate work at University of Chicago and Columbia University. Head of Department of Modern Languages, State Normal School, Indiana, Pa.; Assistant Professor of Modern Languages, St. Lawrence University, N. Y.; Supervisor of Foreign Language Press in the United States during the World War. Assistant Editor of "Foreign Born." (Appointed September 1, 1924.)

R. L. HEWETT, Professor of Anthropology. D.Sc., University of Geneva, Switzerland; Director School of American Research of the Archeological Institute of America; Director, San Diego Museum. (Appointed September 1, 1922.)

LE ELIZABETH JOHNSON, Professor of Biology, B.S., M.S., Ph.D., University of California; Research Assistant, Scripps Biological Institute, La Jolla, California; Instructor, Pasadena High School, 1912-1921. (Appointed September, 1921.)

ELIZA JONES, Drama Production. B.L., M.L., University of California. Director Junior Players of Pasadena Community Playhouse; Drama Instructor in Chouinard Art School, Los Angeles; Organizing Secretary and Instructor in Play Writing of Summer Art Colony at Pasadena Community Playhouse; Drama Organizer and Director of San Diego Community Service. (Appointed September 1, 1925.)

ORIE E. LANDERS, Assistant Professor of Home Economics. A.B., Stanford University; Special Certificate Home Economics, Santa Barbara State Teachers College; Head Department Home Economics, San Juan Union High School; Assistant Dietitian, Fabiola Hospital, Oakland, California, 1918; Home Economics, McKinley High School, Honolulu, T. H.; Kern County Union High School, Bakersfield, California. (Appointed September 1, 1924.)

ES B. LEONARD, Professor of History. A.B., M.A., Ph.D., University of California; graduate study, three years at University of California; Instructor in History, Lowell High School, San Francisco. Teaching Fellow in History, University of California, 1924-1926. (Appointed September 1, 1921.)

B. LESLEY,* Assistant Professor of History. A.B., Stanford University; M.A., University of California; Instructor, Principia School, St. Louis, Mo., 1920-1921; Teaching Fellow in History, University of California, 1922-1923; Active Sons' Traveling Fellow in Europe from University of California, 1923-1924; Acting Assistant Professor of American History, Pomona College, 1925-1926. (Appointed September 1, 1924.)

R. LIVINGSTON, Assistant Professor of Mathematics. B.S., M.A., University of California; Instructor, San Diego Junior College, 1914-1918; Head of Department of Mathematics, Santa Barbara Junior College, 1919-1921. (Appointed September 1, 1921.)

RD S. MCINTYRE, Assistant Professor of Engineering. B.S. (Mining); M.S. Petroleum Engineering) University of California; Mining Engineer Burma Mines, Ltd., Burma, India, 1916-1918; Construction Engineer, Burma Mines, Ltd., Bengal, India, 1918-1919; Mining Engineer Chemist and Mill Foreman, Recia Mines, Ltd., Nicaragua, C. A., 1919-1921; Mine examination work, California and Old Mexico; Senior Instructor University of California, Mining and Petroleum Engineering, 1922-1926; Petroleum Engineer, Standard Oil Company of California; oil-shale research, U. S. Bureau of Mines, Colorado; Head of Science and Mathematics Departments, Taft High School and Junior College, 1926-1927. (Appointed July 1, 1927.)

RANKIN MOON,† Fine Arts. A.B., University of California. Student at San Diego State College and Colorado Springs Academy of Fine Arts. (Appointed September 1, 1926.)

AM P. NASATIR, History. A.B., M.A., Ph.D., University of California; Assistant Teaching Fellow in History, University of California, 1920-1926. Active Sons Traveling Fellow in History (in Europe), 1924-1925; Instructor in History, State University of Iowa, 1926-1927.

leave of absence, 1928-1929.

leave of absence, 1927-1928.

- WILLIAM L. NIDA, Associate Professor of Education, Supervisor of Public School Practice and Appointment Secretary, Ph.B., Ohio State University; graduate student, University of Chicago; M.A., University of Southern California; Principal of Ohio High Schools, nine years; Superintendent of Schools, seventeen years, Illinois; Supervisor Junior High Schools, San Diego, California, two years. (Appointed July 1, 1921.)
- CHARLES E. PETERSON, Director of Physical Education for Men. Student at Oregon Agricultural College, the University of California and the State Normal School of San Diego; student two years under Robert Krohn; Director of Playground Y. M. C. A. Physical Education, Physical Education and Recreation in United States Army camps; Berkeley School System. (Appointed July 1, 1921.)
- WALTER T. PHILLIPS, Assistant Professor of Spanish and French. A.B., University of Washington; M.A., Stanford University; graduate assistant in Spanish and graduate scholar in Spanish, Stanford University; Assistant Professor Modern Languages, Willamette University. (Appointed September 1, 1927.)
- LEO FRANCIS PIERCE, Professor of Chemistry. B.S., Grinnell College; M.S., Tulane University; Ph.D., Stanford University; Research Assistant and Instructor, University of Idaho; Professor of Chemistry, Washburn College; Instructor and graduate student, Tulane University; University Fellow, Stanford University; Deutsche Chemische Gesellschaft. (Appointed September 1, 1923.)
- ALICE M. RAW, Physical Education. A.B., University of Southern California; Student Teacher in Physical Education, Polytechnic High School and University High School, Los Angeles; graduate student, University of Southern California, summer sessions 1924-1925; foreign travel, 1926. (Appointed September 1, 1923.)
- MABEL M. RICHARDS, Training Supervisor and Assistant Professor of Education. B.S. and A.M., University of Missouri; graduate student, University of Southern California; Rural School, City School and High School Teacher; County Superintendent of Schools, six years; Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College, two years. (Appointed September 1, 1921.)
- CHARLES R. SCUDDER, Assistant Professor of Industrial Arts, University of Illinois; State Normal School, Bellingham Washington; A.B., State Teachers College, San Diego; Teacher of Industrial Work at East Chicago, Indiana; Grand Rapids, Michigan; Director Industrial Arts at Evanston, Illinois; Muncie Normal Institute, Muncie, Indiana; State Normal School, Bellingham, Washington. (Appointed September, 1918.)
- W. T. SKILLING, Associate Professor of Agriculture and Nature Study, State Normal School, Los Angeles; Teacher in Los Angeles county and city public schools, ten years; student at Stanford University one year; B.S., M.S., University of California; Assistant in Physics, University of California, 1899-1901. (Appointed September, 1901.)
- FLORENCE L. SMITH, Assistant Professor of English. A.B., Northwestern University; M.A., University of Chicago; Instructor, State Normal School, Oshkosh, Wisconsin. (Appointed July 1, 1917.)
- LEILA D. SMITH,* Assistant Professor of Music. Mus. B., A.B., Oberlin College; formerly Head of Department of Music, State Teachers College, Winona, Minnesota. (Appointed September 1, 1922.)
- MARIAN PEEK SMOOR, Training Supervisor and Assistant Professor of Education. A.B. and A.M., Stanford University; Teacher in Public Schools; Assistant History, Stanford University; Dean of Women, State Normal School, Cheyenne, Washington; Francis W. Parker School, San Diego, California. (Appointed September 1, 1923.)
- WILL J. STANTON, Commercial Law. LL.B., University of Michigan; graduate study, University of Michigan; editor legal journal, fourteen years; Prosecuting Attorney, Michigan and California; Instructor, San Diego High School and Junior College. (Appointed September 1, 1921.)
- S. LAVENDER STOVALL, Assistant Professor of Engineering. Student University of Texas, 1895-1896, 1897-1898; B.S., in Electrical Engineering, University of California, 1924. Five years with the General Electric Company, research and design of apparatus; five years Chief Engineer of Mt. Whitney Power Electric Company; three years on Irrigation Engineering; four years Efficient Engineer in the oil fields of California. (Appointed September 1, 1924.)

*On leave of absence, 1927-1928.

NA SUHL, Assistant in Geography A.B., M.A., University of California; Teaching Fellow and graduate student two years, University of California; teacher in public schools two years. (Appointed September 1, 1926.)

TE RAND TANNER, Assistant Professor of Physical Education. B.S., Columbia University; Graduate Boston Normal School of Gymnastics; Bachelor's Teaching Diploma, Teachers College, Columbia University; tutor, Brookline, Massachusetts; graduate student, University of California, 1925; Supervisor of Physical Education, San Diego County Rural Schools, 1921-1923. (Appointed July, 1904.)

KLIN D. WALKER,† Assistant Professor of English, University of Arizona. Holder of Arizona Rhodes Scholarship to Oxford, 1920-1923. B.A., (Hons. Oxon.), University of Oxford. Graduate Student, University of California. Instructor in Dramatics, Francis W. Parker School, San Diego, California, 1924-1926. (Appointed September 1, 1926.)

I. WRIGHT, Assistant Professor of Commerce. B.S., University of California; graduate study, one year, University of California; Head Department of Commerce, Union High School, Visalia, California, 1917-1921. (Appointed September, 1, 1921.)

Special Lectures in Art

NALD POLAND, M.A., Director of Fine Arts Gallery of San Diego.

H MORRIS, B.A., Assistant Director of Fine Arts Gallery of San Diego.

Assistant Instructors

THY R. HARVEY, Biology. A.B., San Diego State College; graduate work in Biology at Scripps Biological Institute, La Jolla, at the University of California and at the University of Southern California; public school teaching five years. (Appointed September 1, 1924.)

YEVIEE KELLY, Sociology. A.B., University of California; A.M., Columbia University; Los Angeles Public Library School one year; teacher at Corcoran Union High School; Librarian at Northern Arizona Normal School, Flagstaff; Librarian at Scripps Foundation for Research in Population Problems, Oxford, Ohio. (Appointed September 1, 1924.)

JORIE KELLY, Fine Arts. B.E., University of California at Los Angeles, art major; teacher of art in Pasadena city schools. (Appointed September 1, 1927.)

MAS F. McMULLEN, Coach of Basketball. Student and coach of freshman basketball, Oregon State College; instructor at Francis Parker School.

OLD G. BRUCKER, Physical Education for Men. Coach of baseball and freshman football. Student at University of Redlands; basket ball coach, U. S. Naval Training Station; basket ball coach, Y. M. C. A., San Diego. (Appointed September 1, 1927.)

7. DESILVA, Industrial Arts. California Institute of Technology; University of California at Los Angeles; B.A., San Diego State Teachers College. (Appointed September 1, 1927.)

IE FOSTER, Social Work. LL.B., John Marshall Law School; Graduate Chicago School of Civics and Philanthropy; formerly connected with United Charities of Chicago; American Red Cross and United States Children's Bureau; three years experience in Red Cross and Social Service in Austria, Czecho Slovakia and Porto Rico; resident of Hull House and Greenwich House.

on leave of absence, 1928-1929.

CALENDAR 1928-1929

Summer Session, 1928.

Term I, six weeks, June 25-August 3.
Term II, four weeks, August 6-August 28.

Fall Semester, 1928-1929.

September 5, 8.00 a.m., College Aptitude Test.*
September 5, 1.30 p.m., Assembly of New Students.
September 6, 8.00 a.m., Examination in Subject A (English Composition)
September 6, 10.30 a.m., Assembly of New Students.
September 6, 1.30 p.m., Fundamentals Test.†
September 6, 7.30 p.m., Reception to Freshmen.
September 7, 8.30 a.m. to 4.00 p.m., Registration of Old Students.
September 8, 8.30 a.m. to 4.00 p.m., Registration of New Students.
September 11, Class Work Begins.
November 12, Legal Holiday.
December 15, Christmas Recess Begins.
January 2, 1929, Class Work Resumes.
January 24, 1929, Mid-Year Examinations.
January 30, 1929, Mid-Year Graduation Exercises.

Spring Semester, 1928-1929.

January 31, 8.00 a.m., College Aptitude Test.*
January 31, 1.30 p.m., Assembly of New Students.
February 1, 8.00 a.m., Examination in Subject A (English Composition).
February 1, 10.30 a.m., Fundamentals Test.†
February 1, 7.30 p.m., Reception to Freshmen.
February 1, 8.30 a.m. to 4.00 p.m., Registration of Old Students.
February 2, 8.30 a.m. to 4.00 p.m., Registration of New Students.
February 4, Class Work Begins.
March 23-31—Spring Recess.
May 1, Dedication Day.
May 30, Legal Holiday.
June 7-13, Final Examinations.
June 14, Annual Commencement Exercises.

Summer Session, 1929.

Term I, six weeks, June 24-August 2.
Term II, four weeks, August 5-August 27.

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the legislature, later approved by the Governor of the state and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) have been offered, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service in the new three- and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the A.B. (major in Education) were established for this institution June 30, 1922.

On and after July 1, 1927, the courses hitherto carried as "junior college" courses, will be offered as lower division courses of the regular three- and four-year curricula and the junior college, so-called, will give way to the "lower division" which will include, as heretofore, preparatory curricula leading to majors in the arts and the several professional fields.

For the certification of teachers, the authorized courses (elementary, special elementary, special secondary and junior high school) are offered, and require approximately, three years and four years of work done in residence.

*Required of all students, not as a prerequisite for entrance but for purpose of guidance. Former graduates of this college and graduates from approved four-year college courses are exempt. A physical examination, a speech test and a social relations test are also required. The first two are given individually and the last will make special appointments for them. The social relations test is given at the college work has well started at an announced date.

†This is a prerequisite for the following courses in Education: I, CXXVII, CXXVIII and CXXVI. Former graduates of this college and graduates from approved four-year college courses and holders of California teaching credentials are exempt.

THE CALENDAR AND REGISTRATION

The college year is divided into the autumn and spring semesters of eighteen weeks each, followed by a summer quarter consisting of a first term of six weeks (regular Summer Session) and a second term of four weeks in which professional courses of a seminar type are offered to students and teachers whose certification may be met by supplemental units of credit (not to exceed 4) earned in this summer term.

Students may enter at the beginning of either semester and at the beginning of either term of the summer quarter.

The Summer Session meets the needs of regular students who wish to gain credit toward the professional diploma or the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to earn supplemental credit or to shorten the time for completion of work for the Bachelor's Certificate.

Registration of students will be made September 7 and 8. A duly certified transcript of the applicant's record must be in the possession of the Registrar on or before the day of the applicant's registration.

B.—For details, see "Requirements for Admission."

DEPARTMENTS OF INSTRUCTION

Teacher Training

The College offers courses for the training of teachers in both the primary and secondary divisions of the elementary school and in the Junior High School with special recommendation in English, Social Science, Natural Science, Mathematics, Fine Arts, Industrial Arts, Music, and Physical Education. The degree B.A. is granted to students completing the four-year courses in elementary and junior high school education and also in the liberal arts courses.

Special certification courses of secondary grade will be offered in Art, Commercial Education, Health Education, Music (Public School Music), Industrial Arts, and Physical Education.

Students who wish to enter for special certificate courses should not fail to note matriculation requirements.

Liberal Arts

The Liberal Arts division courses are offered in the following fields: Anthropology, Economics, Engineering, English, Foreign Language, Geography, Industrial Art, History and Political Science, Home Economics, Hygiene, Mathematics, Music, Psychology, Botany, Physics, Chemistry and Zoology.

Descriptions of the courses in both the professional and the collegiate field, and complete information as to admission requirements, will be found on the following under the headings "Admission," "Curricula," etc.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

Entering students will be required to meet the health standards set by the Department of physical education, and all lower division students, unless excused for cause, will be required to take the courses in physical education prescribed for freshmen, and sophomores. Furthermore, each student will be expected as a matter of course to lead a life of student and community life, to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. Frequent reports of the student are made by his instructors, so that he may at all times know his standards; but the ability of the student to manage his own educational career to come reasonably near to his best capabilities are factors that will count in final ratings.

Standards of character, as developed by and measured by honest student work, are revealed by evidences of the possession of thoroughgoing self-respect and integrity feeling, particularly as to ideals in the important matters of citizenship and parenthood, are more important than all else, and every student will have full opportunity to show that he is worthy and that he has the capacity and will to manifest and develop character.

For the assistance of students and student organizations, adviserships have been established as follows:

THE STUDENT ADVISERS

Concerning matters of student-body policy, leaves of absence (men), personal matters (men), use of buildings, etc.—The Dean of Men.

Concerning appointments to teaching positions.—The Appointment Secretary.

Concerning the housing and living arrangements of students, rules of conduct, student social affairs, personal advice (women), rules of attendance, etc.—The Dean of Women.

Concerning supervision of practice teaching, conferences, etc.—The Dean of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar.

Concerning health and physical condition, school athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The supervisors of training.

Concerning student-body affairs.—The executive officers of the student-body: The Dean of Liberal Arts; The Dean of Women.

STUDENT LIFE AND ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, The Associated Students. The following list indicates the major activities:

Kappa Delta Pi (National Education Honor), Delta Kappa (Chemistry), Engineering Club, Geography Club, Spanish Club, Art Club, International Relations Club, Two Masque Players, Treble Clef Club, Men's Glee Club, College Orchestra.

Men: Men's Club, Epsilon Eta, Eta Omega Delta, Phi Lambda Zeta, Sigma Lambda, Kappa Phi Sigma, Omega Zeta, Tau Delta Chi, College "Y" Club, The Aztec Club.

Women: Associated Women Students, Women's Athletic Association, College Y. W. C. A., Shen Yo, Sphinx, Fra Di Noi, Komo Klub, Gamma Phi Zeta, Phi Kappa Gamma, Phi Sigma Nu, Sigma Pi Theta, Tau Zeta Rho, S. A. B. E. Club.

Men's Athletics: Football, baseball, basket ball, track, swimming and tennis.

Women's Athletics: Tennis, basket ball, fencing, rowing and swimming.

Publications: The Aztec (weekly), Del Sudoeeste (year book), and El Palen (quarterly).

APPOINTMENT SERVICE

The department of recommendations has charge of the placement of graduates assisting them in securing teaching positions and assisting superintendents and boards of school trustees in finding qualified teachers.

Recommendations are based on records which indicate every item in the candidate's equipment and particular care is taken to select for nomination in each a teacher who can meet the requirements of the position.

FEES AND COURSE CHARGES

(Each Semester)

Registration fee	-----	\$1
Part-time (special student's) registration fee	-----	5
Late registration fee	-----	2
Fee for additional transcript	-----	1
Special examination fee	-----	2

SPECIAL CHARGES

Syllabi	-----	\$0
English, Subject A	-----	
Fundamentals test	-----	
College Aptitude test	-----	
Towel service (men and women)	-----	1
Locker key (Physical Education or Art), each key	-----	

The above fees and charges, with the exception of the transcript and special examination fees, are payable at the time of matriculation. The English, Fundamentals and Thorndike deposits are payable prior to taking the examinations.

COURSE CHARGE DEPOSITS

(Each Semester)

Biology	-----	\$
Botany	-----	
Chemistry 1A-1B, 6AA, 6A-6B, 8-9	-----	
Chemistry 101-102	-----	
Chemistry 123-124 (per hour)	-----	
Chemistry deposit (each course)	-----	
Drama 55A, 55B, 55C, 55D	-----	
Fine Arts—Costume Design, Stage Craft, Elementary Industrial Arts	-----	
Industrial Arts 1A, 1B, 2, 6, 7, 9 13 16 116	-----	
Industrial Arts 4, 5	-----	
Industrial Arts 8A, 8B, 117	-----	

Library	\$2 00
Books (each course, except 2A, 2B)	5 00
Printing	5 00
Psychology 112	1 50
Psychology 1A	2 00
Psychology 1B	7 00

Course charges are payable at a time to be announced, usually about the fourth week, on the official bulletin board. Failure to pay on the specified dates will incur a penalty of 10% on the bill.

ORGANIZATIONS FEES

(Each Semester)

Associated Students	\$7 50
Woman, Sophomore, Junior, Senior Class	50
Associated Women Students	50
Associated Men Students	50

EXPENSES

The Dean of Women will furnish, upon request, addresses of homes in which board and room may be secured, also lists of apartment houses and single rooms which may be patronized by students. Occasionally students are placed in positions where they may earn board, room, or small monetary compensation, but because of irregularity of the demand it is not advisable to enter college entirely dependent upon such an opportunity.

Board and room, two meals per day, may be procured at from \$40 to \$45 per month. Apartments consisting of one room, kitchenette and bath, renting at \$18 to \$25 per month, will accommodate one or two persons. Single rooms with kitchen facilities at from \$10 to \$20 per month are also available. All those listed are in the vicinity of the College.

Other expenses for one semester of eighteen weeks may be estimated from the statement of Fees and Expenses, and Course Charges.

SELF HELP AND LOAN FUND

Opportunities for part-time employment for students not residents of San Diego are frequent, particularly in the case of young women who are able to assist as mother's helpers in housework or in the care of children. A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily not sufficiently remunerative to reduce expenses materially. An employment program for men is conducted by the Dean of the College. The professional loan fund is administered for students in the teacher training courses, seniors being eligible for assistance. The general loan fund is available for short time loans to any young men and women who have been in attendance at the college one or more years. The Kiwanis Club of San Diego and the City Teachers' Association have set aside funds for student loans.

BUILDINGS AND EQUIPMENT

The main college building houses the library, the auditorium, the gymnasium, science laboratories and classrooms. The training school is housed in three separate buildings.

The building for Applied Arts was made ready for occupancy in September, 1922, as a result of the remodeling of the old Training School Building. A new building for physical education of men was finished January 1, 1923, and new quarters for the physical education of women at the same date.

The institution has facilities and equipment as follows:

College Library of 32,000 volumes.

Laboratories for Physics, Chemistry, and Biological Science.

Workshops, studios, and laboratories for the courses in Fine and Industrial Arts and Home Economics.

For Physical Education, a well equipped gymnasium, lockers and showers, classrooms, and athletic field, tennis courts, etc.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained mental effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and above, showing the summer temperature at San Diego, enclose Alaska and Canada. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have American summers and Egyptian winters.

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than the physical ones must be taken into account by the student choosing a college. The institutions and facilities that go to make up the "great college" or the "greater university" must be present in a college or university city, if the student is to work in a genuinely cultural atmosphere. In cultural standards in art, music, literature, and science, San Diego is an eligible college city because while it is not a large city yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-1916, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections; the Director of the San Diego Museum is a member of the faculty of the College. The Art Gallery contains excellent exhibitions of paintings, and there are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for game and community gatherings and pageants.

At La Jolla, within the city limits, the Scripps Biological Institute, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point, particularly as the College will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The professional, teacher-training courses profit because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary schools, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the College.

Much of what is best in modern thought and influences is brought to the student body through its weekly assembly, the programs for which, as arranged by a committee of students and faculty, include almost every worth while topic and appeal.

Routine and Procedure

Outside of the necessary routine and procedure in the conduct of registration, class attendance, conduct of examinations, etc., college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system"; but there is a standard of honor as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom or of student-body by-laws) and, usually, are settled by student action.

One problem, in process of solution, is that of student relations to the conduct of study. At present, the studies are prescribed in arrangements of curricula, "courses," with certain elections by the individual student, and these prescriptions are, of course, necessary. However, an effort is being made to give the student body a certain voice in and responsibility for study arrangements, through a committee of students and faculty members.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills, mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round, and the College Outdoor Theater makes possible the presentation of many student productions in drama and pageant.

REQUIREMENTS FOR ADMISSION

I. Freshman Standing.

Every person admitted as a student to this college must be of good character, of good health, at least 16 years of age, and of that class of persons, of proper age, would be admitted to the public schools of the state without restriction. Those who wish to enter a teacher training course must be free from any physical or other defect which would impair their fitness for the teaching service.

Graduates of accredited public high schools of California, graduates of high schools of California, and graduates of schools of secondary grade of other states recognized by this college as equal in rank to an accredited public high school

California, who have completed a regular four-year course of study, and who are recommended by the principal of the school in which such course of study was completed, may be admitted to undergraduate standing.

Candidates may be admitted by either of two methods:

Clear admission. High school graduates who present twelve recommended certificates of recommendation, will be granted clear admission. Graduates of three-year senior high schools must present nine recommended units completed in grades ten, eleven, twelve.

Provisional admission. High school graduates who present fewer than the required number of recommended units, but who through their principals' estimates and recommendations, present satisfactory evidence of ability to profit by studies in teacher training, who have abilities, interests and talents desirable in teaching, and who pass suitable college aptitudes tests, may be admitted as provisional students. At the close of the first semester in residence, a complete evaluation of the credentials and records of all such students will be made. Students will then be granted clear admission, dropped from the college, or for sufficient reason continued as provisional students.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can not meet the requirements under either of the above methods. The entrance examinations of the Board are held once each year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon blank form to be obtained from the secretary of the Board upon request.

Advanced Standing.

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to average in this college. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the work upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit as determined by the Committee on Advanced Standing.

B.—Transcripts of record from other institutions will not be returned or copies of them made.

Special Students.

A candidate not less than 21 years of age who has not had the opportunity to complete a satisfactory high school course but who is considered competent to undertake certain courses may be admitted to special standing. Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students. Entrance examinations in the subjects of fundamental importance for work proposed will be assigned whenever it seems advisable. Such students may become candidates for graduation upon satisfying the regular entrance requirements.

GENERAL REGULATIONS

Examinations

All students entering the college are required to take the following tests, mainly for purposes of guidance and assistance: (a) College Aptitude Test. (b) English Composition Test. (c) Social Relations Test. (d) Speech Test. Exceptions may be made for students who register for 6 units of work or less, for former graduates of this college, and for graduates of approved four-year colleges.

The Fundamentals Test in reading, spelling, arithmetic, etc., is a prerequisite for entrance in courses in Education (see descriptions of courses in Education). Exceptions may be made for former graduates of this college and for graduates of approved four-year colleges.

A physical examination is required of all students at entrance.

Registration

All students are required to register on one of the regular registration days preceding the opening of the class work of each semester. Any student who registers after the close of the first week of the semester is subject to limitation of his study. A late registration fee of two dollars must be paid for registering after the close of the regular registration period. Changes in study lists may be made only with the approval of the proper study-lists officer.

Matriculation

A student is matriculated when he has satisfied all entrance requirements and has demonstrated his ability to do satisfactory college work. The standing of all students is therefore provisional during the first semester of residence.

Classification

Regular students are those students who have complied with the requirements of matriculation and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 28 to 63 units of work are classified as sophomores; those who have completed 64 to 91 units as juniors; and those who have completed 92 or more units are seniors.

Units of Work and Study-Lists Limits

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation together with two hours of preparation; or three hours of field or laboratory work.

Sixteen units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal semester's program for all students except those in Engineering, where the normal requirement is $17\frac{1}{2}$ or $18\frac{1}{2}$ units. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points. 18 units will be credited provided the student attained an average of not less than 2.0 grade points. Any course in which a student received a passing grade may be used in the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student under 21 years of age will be allowed to register for less than 12 units without the permission of the Registrar.

SPECIAL SUBJECT REQUIREMENTS

English Composition

An entrance test in English (Subject A or an equivalent) is given and results must be considered by students and advisers in the making of schedules. Students are themselves primarily responsible in the matter of overcoming deficiencies. No student whose use of the English language continues to be notably inaccurate or inadequate should expect to receive a certificate of graduation from the college.

Physical Education and Hygiene

All regular students upon admission to the College must report to the physical health examiner for enrollment in physical education classes. A student may be excused from exercises in physical education on account of illness or physical disability only by petition to the health examiner.

Scholarship Grades and Grade Points

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus one point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D, otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. As in the case of an E the work may be completed during the next semester or the grade automatically becomes an F.

To qualify for a certificate in any curriculum or for a transcript of scholarship record in transferring to another collegiate institution, a student must have earned as many grade points as he has earned units of credit; that is, he must have attained an average of at least C grade in all work undertaken at the College.

Conditions and Failures

Credit is not given for courses in which the student has been given a grade E (conditioned) except upon the removal of the deficiency by supplementary examinations or study. A report of "incomplete" is made only in case the student for good reasons, has been absent from class meetings or examinations or

to perform a definite part of the work of the course. A condition or "incomplete" not removed before the end of the following semester is considered a failure. In case of failure in a course no credit is given until the course has been repeated.

Probation and Disqualification

A student whose scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the College. Any student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the College to the close of any semester shall be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

A probational student whose scholarship falls below an average grade of D in any single semester is disqualified for further attendance at the College. Probationary status may be continued until the cumulative grade point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried in any semester.

A disqualified student may be reinstated after an interval of one semester for a record satisfactory to the Committee on Scholarship. All applications for reinstatement must be in writing.

Eligibility for Extra-Curricular Activities

A limited student who fails to pass in all subjects for which he is registered in any other student who fails to pass in 12 units of work in any semester is ineligible in the next succeeding semester to represent the College in connection with athletic, literary, musical, dramatic, social, or other organization.

Special Examinations and Reexaminations

Entrance examinations and examinations taken for the purpose of removing educational deficiencies or making up a course left "incomplete" are regarded as special examinations. Reexaminations are permitted only for the purpose of removing deficiencies incurred in college courses and can not be taken for the purpose of improving the grade mark recorded on the student's permanent record. A fee of two dollars, payable in advance, is charged for every special examination and reexamination.

Withdrawals From Class

A student may not withdraw from class without the permission of the proper faculty officer. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. A withdrawal after the sixth week of a semester except for reasons beyond the student's control is interpreted as a failure in the course.

Leave of Absence

A student should apply to his instructor for a leave of absence or an excuse for having been absent from a class exercise. A leave of absence for one or more semesters should be obtained from the proper dean. An excuse for absence does not relieve the student from completing all the work of each course to the satisfaction of the instructor.

Fellowships

Fellowships (without honorarium) have been instituted, a fellowship to be conferred by vote of the faculty on nomination of the department concerned, and a title to the recipient to special training and to recommendation to county boards of education for the special elementary or the special junior high school certificate. Candidates must be graduates of California, or equivalent, Teachers Colleges, and must submit satisfactory evidence of special fitness and attainment, or must be able to show two years of college or other equivalent training and special fitness. Holders of fellowships who have done one year of satisfactory work will be eligible for recommendation for the special elementary and junior high school certificate; provided, that within the period specified, they are able to meet the requirements of the State Board of Education for special certification.

DEGREE REQUIREMENTS

General Requirements for the Degree of Bachelor of Arts in the Teachers College and the Liberal Arts College

The electives must be so chosen that, with the required work, the student will have a total of 6 units of credit in English, 12 units in Social Science and 12 units in Natural Science. Courses in journalism or in speech arts are not accepted as satisfying the English requirements. The electives in Natural Science may be reduced to a minimum of 6 units if the student presents acceptable grades from the

high school in Natural Science in laboratory courses offered in the third or fourth year. In general, each year's work of high school science will thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work, simply an exemption of the requirements will be permitted.

Courses in the freshman and sophomore years are called Lower Division work and courses in the junior and senior years are called Upper Division. The former are given course numbers below 100 or C, and the latter are given numbers 100 or above.

At least 40 of the units completed during the junior and senior years shall be in Upper Division courses. Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

The course in the U. S. Constitution (Pol. Sci. 101), or the substitute course in Political Science 1B or U. S. History 171B, is required of all candidates for the A.B. degree.

A minimum of 124 units of college work is required. Not less than 54 of the units must be earned in the junior and senior years.

All candidates for the A.B. degree must complete at least 30 units of work in this College. 24 units must be completed in the senior or final year, and 12 of these units in the fall or spring semester of the senior year. The latter provision shall not apply to graduates from the elementary school course of this College on September 1, 1929.

The number of grade points acquired in this College by the candidate for degree must be equal to the number of units registered on his permanent record. (See page 16 for an explanation of scholarship grades and grade point averages.) Credits from other colleges will be evaluated in accordance with this general plan.

TEACHERS COLLEGE CURRICULUM

Leading to the A.B. degree and also to the General Elementary Credential (permitting the holder to teach in grades I-VI), or to the General Junior High School Credential (permitting the holder to teach in grades VII-X), or to both credentials.

Freshman Year

First Semester—

Biology 10A (unless taken in high school) -----
 Social Ethics -----
 Geography 1A, Elements (Natural Science) -----
 Physical Education 1A or 52A -----
 Fine Arts 6A, Art Structure* -----

Second Semester—

Biology 10B (unless taken in high school) -----
 Geography 2A, Regions (Social Science) -----
 Physical Education 1B or 52B -----
 Ed. XIX, Art in the Elementary School* -----

Either Semester—

Sociology 10, Introduction to Social Science -----
 Electives for Junior High Credential 18, for Elementary Credential or both -----

Sophomore Year

First Semester—

Psychology 2A, General Psychology -----
 Music 1A, Music Fundamentals* -----
 Physical Education 52, Play Activities* or -----
 Physical Education 1C or 52C -----

Second Semester—

Psychology 2C, Genetic Psychology -----
 Ed. XVII, Music in the Elementary School* -----
 Physical Education 53, Administration* -----
 Physical Education 1D or 52D -----

Either Semester—

Ed. I, Introduction to Education -----
 Industrial Arts 61A* or 61B* (both required) -----
 Electives for Junior High Credential 22, for Elementary Credential or both -----

Junior Year

First Semester—

Ed. CXXVIII Primary Curriculum* -----
 Ed. CXXIX Mathematics in the Elementary School* -----
 Ed. CXXVI Children's Literature* -----

	Units of Credit
nd Semester—	
1. CXVI Practice Teaching-----	3
er Semester—	
1. CVIII Educational Measurements-----	3
Curriculum in Field of Academic Major,† or-----	2
1. CIV Elementary Curriculum* (or both)-----	3
Physical Education 51, Health Education-----	2
atives for Junior High Credential 20, for Elementary Credential 12, or both-----	10
	30

Senior Year

st Semester—	
1. CXVI Practice Teaching-----	6 or 9
nd Semester—	
1. CVI Principles of Elementary Education* or-----	3
1. CI Principles of Junior High School Education†-----	3
atives-----	21 or 18
	30

Academic Teaching Major

The junior high school requires departmental teachers who have specialized in particular fields. Students seeking the junior high school credential must so pattern their courses that they will include a major of twenty-four units of credit in a subject or field taught in junior high school. This academic teaching major should be patterned early in the course so that it will be sure of approval as satisfying the requirement. If the student has not had adequate preparation in the high school for the academic teaching major some additional college work may be necessary. A minimum of twenty-four units in education is required for any teaching credential and a maximum of forty credits may be taken.

PROFESSIONAL COURSES
The Elementary Diploma Course
Lapses September 15, 1930

Freshman Year

	Units of Credit
lish-----	6
ntation-----	1
oductory Principles of Education I-----	3
duction to Geography, Elements 1A and Regions 2A-----	4
ematics in the Elementary School, Ed. XII-----	2
sical Education-----	1
atives ¹ -----	15
	32
Total-----	32

Sophomore Year

hology 2A and 2C-----	6
nary Curriculum, Ed. CXXVIII-----	2
ren's Literature, Ed. CXXVI-----	2
ic in the Elementary School, Ed. XVII-----	2
in the Elementary School, Ed. XIX-----	2
sical Education, 52, 53, 52C or 52D-----	3
atives-----	15
	32
Total-----	32

Not required if only a junior high school credential is sought.

Not required if only an elementary school credential is sought.

Making all courses excepting Ed. CVI leads to the combined Elementary and Junior High School Credential, permitting the holder to teach in grades I-X. See statements of requirements in social sciences, natural sciences and academic teaching major.

Electives must be so chosen that the student will have a total of twelve units of credit in Social Science (Contemporary Civilization, Political Science, History, Economics, Sociology, Anthropology) and twelve units of Biological and Physical Science. They must include six units in Biology unless the student presents recommended grades in this subject from high school. Electives in the Junior year must include a minimum of four units in Upper Division courses in the Liberal Arts curricula.

Junior Year

Elementary School Curriculum, Ed. CIV	-----	Unit
Educational Measurements, Ed. CVIII	-----	Credit
Practice Teaching, Ed. CXVI	-----	
United States Constitution (Pol. Sci. 101)	-----	
Electives	-----	
Total	-----	

CURRICULA FOR SPECIAL CERTIFICATION

Special credentials enabling the holder to teach in the special field designated grades one to twelve, inclusive, will be granted upon graduation with the degree in the fields of Art, Commercial Education, Health Education, Industrial Arts, Music, and Physical Education. Fifteen units of work in education a minimum and from twenty-four to fifty units in the special field will be required. (California teachers in service may, before September 15, 1928, file application for the credential desired with the Division of Teacher Training and Certification, an outline of the work planned to meet the requirements expiring September 15, 1928. If the programs are acceptable and can be completed by September 15, 1928, an extension of time will be granted.)

Physical Education Type

(Physical Training Activities)

Credential of Elementary and Junior High School Grade.
 Credential of Secondary School Grade.

Arts Type

Credential of Elementary and Junior High School Grade.

Music Type

(Public School Music)

NOTE.—Students may matriculate for this curriculum only upon the fellow plan outlined on page 17 of this bulletin. Applicants for admission should send complete transcripts of record showing the number of units of work in music completed.
 Credential of Elementary and Junior High School Grade.

Prevocational Type

(Home Making)

Credential of Elementary and Junior High School Grade.

Prevocational Type

(Occupations and Home Mechanics)

Credential of Elementary and Junior High School Grade.
 (Offered for the "Limited Class" only.)

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND THE DEGREE IN THE LIBERAL ARTS CURRICULA

Letters and Science Curriculum

Subject to the approval of the State Board of Education. For additional requirements see page 17.)

Leading to the A.B. degree. Completion of this course also enables the graduate to satisfy the undergraduate requirements for the General Secondary Credential and, with post-graduate work, will enable the holder to teach in a senior high school or junior college.

Lower Division

General Requirements for All Students.

College Aptitude Test.

An examination in Subject A (English Composition).

Hygiene, 1 unit (Men), 2 units (Women).

Physical Education, 2 units.

Social Ethics.

Orientation, 2 units.

English, 6 units.

Foreign Language.

At least 15 units in not more than two languages. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

Mathematics.

High school courses in elementary algebra and geometry.

Natural Science, 12 units.

A maximum of 6 units chosen from the following high school courses when offered in the third or fourth year of the high school:

High School Physics,* 3 units.

High School Chemistry,* 3 units.

High School Botany, 3 units.

High School Biology, 3 units.

High School Physiology, 3 units.

High School Zoology, 3 units.

A minimum of 6 units chosen from the following:

Astronomy, 1, 3 units.

Biology, 10A-10B,* 6 units.

Botany 2A*-2B,* 8 units; Botany 4, 3 units.

Chemistry 1A*-1B,* 10 units; 6A*-6B,* 6 units; 8-9,* 6 units.

Geology 1A, 3 units.

Physics 2A-2B, 6 units; 3A-3B,* 2 units; 1A-1B* and 4A-4B,* 12 units.

Zoology, 1A*-1B,* 8 units.

Foreign Language, additional to (b) or Mathematics, additional to (c); 6 units, chosen from the following:

French: Any two consecutive courses of A, B, C, D, 102A, 102B, 105A, 105B, SC, SD.

Spanish: Any two consecutive courses of A, B, C, D, 102A, 102B, 105A, 105B, 110A, 110B.

German: Any two consecutive courses of A, B, C, D, SC, SD.

Latin: Two years of High School Latin, each year counting as 3 units.

Mathematics: 3A, 3B, 6.

Social Science, 12 units, chosen from the following:

Anthropology, 1A-1B, Commercial Law 18A-18B.

*Economics 1A-1B, Economic History 11, *Geography 1, 2.

*History 4A-4B, *5A-5B, *8A-8B, *Political Science 1A-1B.

*Psychology 2A-2B, Sociology 50.

Courses required for the major.

See subjects listed under each major subject in the descriptive list of courses of instruction.

Upper Division

(See page 17 for additional requirements.)

Courses prescribed in the lower division should be completed before the Junior year. The removal of deficiencies in the Junior year may prolong the college course beyond the normal period of time.

One of the courses marked with an asterisk must be chosen to meet the Natural Science requirements and the Social Science requirement, respectively.

The requirements of the Major Department must be completed in accordance with the following general rules:

A minimum of 24 units in the Major subject is required, at least 15 units of which shall be in upper division courses completed in the Junior and Senior years. The Major Department shall recommend, in addition to the courses prescribed, such other courses as may be considered desirable and shall exercise advisory supervision of the student's program during his Junior and Senior years.

The student is advised to choose his Major Department as early in his college course as practicable so that he may be able to plan his work according to the requirements given in the descriptive list of courses under the head of the Major Department. Failure to meet the lower division requirements of the Department before the Junior year may make it impossible to satisfy the upper division requirements within the normal period of two years.

A minimum of 12 units in Education is required and a maximum of 18 units will be counted toward the A.B. degree in the College of Liberal Arts. The courses in Education must be chosen from the following list:

Ed. I, Introductory Principles (lower division elective); Ed. CI, Principles of Junior High School Education or Ed. CVI, Principles of Elementary Education; Ed. CVII, History of Education; Ed. CVIII, Educational Measurements; Ed. CIX, Educational Administration and Supervision; Ed. CXXX, Educational Psychology; Ed. CXL, Elementary Statistics; Psychology 2C, Genetic Psychology.

A total of not more than 12 units of the applied and vocational courses taken one or more of the departments listed below will be counted toward the degree:

Agriculture: Home Floriculture 26; Nature Study 20.

Economics: Typewriting: 1A-1B, 2A; Stenography 1A-1B, 2A; Office Methods 3A; Business Mathematics A.

Industrial Arts: Woodwork 1A-1B; Painting and Finishing 2; Wood Turning 5; Cabinet Work 5; Upholstering 6; Concrete Work 7; Sheet Metal 9; Pipe Fitting 10; Automobile Mechanics 13; Elementary Industrial Arts 61A and 61B; Automobile Repair 116; Advanced Cabinet Work 117.

English: Applied Journalism 53A-53B.

Music: Glee Clubs and Choral Clubs.

Physical Education: All sport and play activities; Physical Education 51 and 52.

Physiology: Physiology A.

Commerce Curriculum

a) General Requirements.

College Aptitude Test.

An examination in Subject A (English Composition).

Hygiene, 1 unit (Men), 2 units (Women).

Physical Education, 2 units.

Social Ethics.

Orientation, 2 units.

English Composition, 6 units.

b) A reading knowledge of French, Spanish, or German, 9 units.

(A high school language may be used to satisfy this requirement in whole or in part, each year-course counting as 3 units.)

c) History 4A-4B, 8A-8B, or Political Science 1A-1B, 6 units, or any combination of the foregoing courses.

d) Geography 1, 3 units, and Geography 2, 3 units.

e) Mathematics 2, 3 units.

(Prerequisites: Trigonometry and two years of high school Algebra; College Algebra.)

f) Natural Science, 9 units.

(This requirement may be satisfied in part by high school courses in Physics and Chemistry, each year-course counting as 3 units.)

g) Economics 1A-1B, 6 units.

h) Electives.

Upper Division

Requirements for Senior standing in the Commerce curriculum, besides the Junior Certificate, include Economics 14A-14B (Accounting), 6 units; Economics 18A-18B (Business Law), 6 units; Economics 11 (Economic History), 3 units; Economics 140A-B (Elementary Statistics), 4 units; and 9 additional units in economics.

Commerce candidates for the A.B. degree must meet the upper division requirements of the Letters and Science curriculum with a major in economics.

Prelegal Curriculum

a) The lower division requirements of the Letters and Science curriculum, except in special cases, the Commerce curriculum should be met in full.

lectives recommended:

History 4A-4B, 6 units.
Economics 1A-1B, 6 units.
Political Science, 1A-1B, 6 units.
Public Speaking, 1A-1B, 6 units.
Sociology 50, 3 units.
Psychology 2A-2B, 6 units.
Accounting, 14A-14B, 8 units.
Business Law 18A-18B, 6 units.
English 52A-52B.

third year:

Required: History 171A-171B and a minimum of 6 additional upper division units.

Premedical Curriculum

The lower division requirements of the Letters and Science curriculum should be met in full.

Additional requirements:

Chemistry 1A-1B, 10 units.
Chemistry 6A-6B, 6 units, 8-9, 6 units.
Zoology 1A-1B, 8 units.
A reading knowledge of German or French (3 years of High School German or French or 10 units of college German or French).

third year (Required):

Physics 2A-2B, 6 units.
Physics 3A-3B, 2 units.
Chemistry 101-102, 8 units.
Zoology 100, 2 units.
Political Science 101, 2 units.

Pre dental Curriculum

The lower division requirements of the Letters and Science curriculum should be met in full.

Additional requirements:

Chemistry 1A-1B, 10 units.
Chemistry 8-9, 6 units.
Biology 1A-1B, 8 units, or Biology 10A-10B, 6 units.
Physics 2A-2B and 3A-3B, 8 units.

Pre architectural Curriculum

The lower division requirements of the Letters and Science curriculum should be met in full.

Additional requirements (first year):

Mathematics 3A-3B, 6 units.
Physics 1A-1B, 6 units.
Art A-B, 4 units.
Art 6A-6B, 4 units.

Social Service Curriculum

The lower division requirements of the Letters and Science curriculum should be met in full.

Additional requirements:

Economics 1A-1B, 6 units.
Biology 10A-10B, 6 units; or Zoology 1A, 4 units; or Physiology A, 4 units.
Anthropology 1A-1B, 4 units.
Sociology 50, 3 units.
Biology 10A-10B, 6 units; or Zoology 1A, 4 units; or Physiology A, 4 units.
Political Science 1A-1B.
History 4A-4B, or 5A-5B, or 8A-8B.

third year (Required):

History 171A-171B and a minimum of 6 additional upper division units.

Mechanical, Electrical, Civil and Mining Engineering Curricula
First Year

	Sem. I Units	Se U
Mathematics 3A-3B	3	
Physics 1A-1B	3	
Chemistry 1A-1B	3	
Plane Surveying 1A-1B	3	
Orientation	2	
Hygiene 1	1	
Physical Education	$\frac{1}{2}$	
Social Ethics		
Social Science (Elective)		
	17 $\frac{1}{2}$	

Second Year

Mechanical and Electrical Engineering

Mathematics 4A-4B	3	
Physics 1C-1D	3	
Descriptive Geometry 3D	3	
Machine Drawing and Design 6A	1	
Applied Mechanics 1A	3	
Electrical Engineering 1		
Pattern Making 8A-8B	2	
Physical Education	$\frac{1}{2}$	
English	3	
	18 $\frac{1}{2}$	

Civil Engineering

Mathematics 4A-4B	3	
Physics 1C-1D	3	
Descriptive Geometry 3D	3	
Geology 1A		
English	3	
Physical Education	$\frac{1}{2}$	
Railroad and Irrigation:		
Applied Mechanics 1A	3	
Pattern Making 8A-8B	2	
Electives	1	
	18 $\frac{1}{2}$	
Sanitary and Municipal:		
Chemistry 8-9	3	
Chemistry 6A-6B	3	
	18 $\frac{1}{2}$	

Curriculum in Industrial and Engineering Chemistry
First Year

Mathematics 3A-3B	3	
Physics 1A-1B	3	
Chemistry 1A-1B	5	
German A-B	5	
Orientation	2	
Hygiene 1		
Physical Education	$\frac{1}{2}$	
Social Ethics		
	18 $\frac{1}{2}$	

Second Year

Mathematics 4A-4B	3	
Physics 1C-1D	3	
Chemistry 6A-6B	3	
Chemistry 8-9	3	
English	3	
History or Political Science or Economics	3	
Physical Education	$\frac{1}{2}$	
	18 $\frac{1}{2}$	

Preagricultural Curriculum

First Year

	Units Sem. I	Units Sem. II
1 Ethics -----	2	--
2 Civics -----	1	1
3 Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
4 English 2A-2B -----	4	4
5 History 1A-1B -----	5	5
6 Science 2A-2B -----	3	3
7 Freshman -----	3	3
	17 $\frac{1}{2}$	16 $\frac{1}{2}$

Second Year

1 History 6A-6B -----	3	3
2 History 8-9 -----	3	3
3 English 1A-1B -----	4	4
4 Economics 1A-1B -----	3	3
5 Psychology 1A-1B -----	3	3
6 Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

Curricula in Accountancy and Secretarial Training

The aim in giving courses in Accountancy and in Secretarial Training is to give a business preparation of college grade. The courses are open to high school graduates who majored in commercial subjects as well as to those who have had no preparation for business. Candidates of not less than twenty-one years of age who have completed four years of high school work may also be admitted as special students. The curricula have been formulated with a recognition of the varying needs of those who plan to engage actively in commercial pursuits. To this end, courses of one and of two years in length are provided in Accountancy and in Secretarial Training, or in a combination thereof. A minimum of 64 units of credit is required for a certificate.

It is the intention in the different courses to encourage individual research work in order that the student may become more resourceful, self-reliant, and keener to analyze and cope with business conditions and problems. To furnish material for research work, the city of San Diego will be used as a laboratory, through the cooperation of merchants, manufacturers, transportation men and financiers.

Accountancy

Two-Year Course (leading to Certificate in Accountancy).

First Year

	Sem. I Units	Sem. II Units
Accounting 14A-14B -----	4	3
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	--	--
Orientation -----	2	--
Hygiene -----	--	1
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----	--	--
English Composition -----	3	3
Electives -----	3	5
	16 $\frac{1}{2}$	16 $\frac{1}{2}$

Second Year

Advanced Accounting 60A-60B -----	3	3
Commercial Law 18A-18B -----	3	3
Economics 1A-1B -----	3	3
Psychology 2A-2B or Electives -----	3	3
Office Methods 3A -----	--	3
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Economic History 11 or Electives -----	3	--
	15 $\frac{1}{2}$	15 $\frac{1}{2}$

Secretarial Training

Two-Year Course (leading to Secretarial Certificate).

First Year

	Sem. I Units	Sem. II Units
Shorthand 1A-1B -----	5	1
Typewriting 1A-1B -----	4	
Hygiene 2 -----	2	
Physical Education -----	$\frac{1}{2}$	
Social Ethics -----		
Orientation -----	2	
English Composition -----	3	
Electives -----		
	16 $\frac{1}{2}$	1

Second Year

Commercial Law 18A-18B -----	3	
Office Methods 3A -----		
Economics 1A-1B -----	3	
Accounting 14A-14B -----	4	
Psychology 2A-2B or Electives -----	3	
Physical Education -----	$\frac{1}{2}$	
Economics History 11 or Electives -----	3	
Business Mathematics A -----		
	16 $\frac{1}{2}$	1

Accountancy and Secretarial Training

First Year

Accounting 14A-14B -----	4	
English Composition -----	3	
Typewriting 1A-1B -----	4	
Business Mathematics A -----		
Orientation -----	2	
Hygiene -----		
Physical Education -----	$\frac{1}{2}$	
Social Ethics -----		
Electives -----	3	
	16 $\frac{1}{2}$	1

Second Year

Advanced Accounting 60A-60B -----	3	
Commercial Law 18A-18B -----	3	
Office Methods 3A -----		
Economics 1A-1B -----	3	
Shorthand 1A-1B -----	5	
Physical Education -----	$\frac{1}{2}$	
Electives -----	2	
	16 $\frac{1}{2}$	1

COURSES OF INSTRUCTION

The "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks. Courses numbered from 1 to 99 and I to XCIX are freshman or sophomore (lower division) courses; those numbered from 100 to 199 and C to CXCIX are junior or senior (upper division) courses, available for sophomores only by special arrangement.

AGRICULTURE

Home Floriculture

SKILLING

A study of ornamental gardening to familiarize students with material used in planning and methods of propagation. A part of the work consists in lath house work and visits to nurseries, green houses and florists. The course is especially designed to furnish a part of the equipment needed by those intending to teach floriculture study and general science.

An elective for teachers college students, not classified as a natural science.

Two units; either semester.

Nature Study

SKILLING

The course aims to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper division), and partly from life studies of the plant and animal world (for lower division).

An elective for teachers college students, classified as a natural science.

Two units; either semester.

ANTHROPOLOGY

The Major in Anthropology (lower division)—Anthropology 1A, 1B.

General Anthropology: Origin and Antiquity of Man

HEWETT

Man as an animal; heredity; races and race problems; earliest culture.

Two units; second semester.

General Anthropology: Origin and Development of Civilization

HEWETT

The source and growth of institutions, art, customs, industries, language, and religion. Prerequisite: Anthropology 1A.

Two units; second semester.

ASTRONOMY

The Major in Astronomy (lower division)—Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 5A-5B, Physics 2A-2B and 3A-3B or 1A-1B and 1C-1D, a working knowledge of French or German.

Descriptive Astronomy

SKILLING

This cultural course is planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are required. Especial attention is given to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with a 6-inch Alvin Clarke telescope is used for observation. Also a good selection of lantern slides is used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry.

Three units; either semester.

Modern Astronomy

SKILLING

Stars and nebulae. A study of modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisites: Astronomy 1 and a knowledge of physics.

Two units; one semester.

BIOLOGICAL SCIENCE

The biological science courses are grouped under the following heads: Biology, Botany, Zoology.

General students who are taking the minimum of biological science should register for Biology 10A-10B (6 units) whether or not they have taken any high school biology.

Students who are taking more than the minimum of biological science or who have taken high school botany or zoology should not register for Biology 10A-10B but should take botany or zoology.

For courses in the teaching of biological science in the schools, see Education XX, XXV, and CXXV.

BIOLOGY

M. E. JOHNS

10A-10B. General Biology

The fundamentals of plant and animal biology, with elementary work in heredity, evolution and eugenics. The laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic facts of biology. It is designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures or recitations and one three-hour laboratory period per week.

Not open for credit to students who have taken Botany 2 or Zoology 1.
Three units; both semesters.

BOTANY

The Major in Botany (lower division)—Required: Botany 2A-2B and high school chemistry or Chemistry 1A-1B. Recommended: Chemistry 8 and 9, French, German and elementary courses in other biological subjects.

2A. General Botany

A study of the fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.
Four units; first semester.

2B. General Botany

A continuation of 2A treating morphology and relationships of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Four units; second semester.

4. California Plants

Lectures, laboratory exercises and field work on the classification and ecology of plants of the San Diego region. Two lectures and one three-hour laboratory period per week.

Three units; second semester.

102. Plant Geography

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or Botany 4, or equivalent.

Two units; first semester.

ZOOLOGY

The Major in Zoology (lower division)—Required: Zoology 1A-1B and high school chemistry or Chemistry 1A-1B. Recommended: Chemistry 8 and 9, French, German, and elementary courses in other biological subjects.

1A. General Zoology

An introduction to animal biology dealing with structure, functions and evolution of animal life. The laboratory work supplements the lectures and is based on the study and observation of living and preserved material. The course acquaints one with the fundamental facts and theories of biology as they pertain to animal life. It is valuable to the general student as well as to the biology specialist. Two lectures or recitations and two three-hour laboratory periods per week.

Four units; first semester.

1B. General Zoology

The structure, relationships, and classification of the chordates. Dissection of shark and cat. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A.

Four units; second semester.

100. Embryology

The development of vertebrates as illustrated by the chick, frog, and pig. Two hours per week of lecture, laboratory, and recitation. Prerequisite: Zoology 1A or a grade of C or better in Biology 10B.

Three units; second semester.

112. Invertebrate Zoology

The structure, classification, habits, and life histories of the invertebrates of the region, particularly of the marine fauna. One hour of lecture and six hours of laboratory per week. Prerequisite: Biology 10A-10B or Zoology 1A.

Three units; first semester.

BOTANY

(See Biological Science.)

CHEMISTRY

The Major in Chemistry (lower division)—Chemistry 1A-1B, with a grade of C or better. Chemistry 6A-6B, Physics 2A-2B or 1A-1B, Mathematics C and 3B, or their equivalents, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

The Major (upper division)—All units in excess of fourteen are counted as upper division units when taken in the junior or senior year. The minimum requirement for the major must include Chemistry 8-9, 101-102 and 123-124. The organization of the course for the major student must follow a definite plan approved by the department.

B. General Chemistry

PIERCE, GILKEY

The general principles, laws of chemical combination and a description of the elements and their important compounds. Two lectures, one quiz and two laboratory sessions per week. The second semester laboratory is Qualitative Analysis throughout. Prerequisites: High School Chemistry or High School Physics and Stoichiometry.

Five units; both semesters.

C. Qualitative Analysis

PIERCE

A study of qualitative separations and theories as applied not only to solutions (ores, slags, alloys, and solid salts. One hour lecture and quiz, three laboratory periods. Prerequisite: Chemistry 1A-1B.

Four units; first semester.

3B. Introductory Quantitative Analysis

PIERCE

The work consists of determinations by gravimetric, volumetric and electrochemical analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Three units; both semesters.

D. Organic Chemistry

GILKEY

A study of the carbon compounds (aliphatic and aromatic) and their derivatives, including the synthesis of different compounds and the proof of their constitution. A general consideration of the subject and the principles involved. Two lectures or quiz and one laboratory period, first semester; one lecture or quiz and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B.

Three units; both semesters.

102. Advanced Inorganic Chemistry

PIERCE

The course treats of the laws and theories of elementary work from the viewpoint of physical chemistry. The laboratory work covers such typical items as gas laws, mol weights, laws of combination, ionization, Equilibria (homogeneous, heterogeneous and complex) and electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: 1A-1B, 6A-6B, 8-9.

Four units; both semesters.

124. Organic Preparations

PIERCE

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. A reading knowledge of German is desirable. Laboratory conferences. Prerequisite: 8-9. Hours to be arranged.

Two to five units; both semesters.

ECONOMICS

The major in Economics (lower division): Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 12B; Geography 1 and 2. Recommended: Sociology 50, Accounting 14A-14B, Commercial Law 18A-18B.

1B. Principles of Economics

A. G. PETERSON

A careful consideration is given to the basic principles of economics: utility, cost, value, price; economic production, distribution, and consumption; rent, interest, wages, and profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs; transportation corporations, labor problems, socialism, taxation, etc. The object of the course is (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a sound foundation in economic principles; and (3) to introduce the future citizens to the political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Three units; both semesters.

11. Economic History of the United States

WRIGHT

A comprehensive survey of American economic development and of national legislation in the field of industry.

Three units; second semester.

14A-14B. Accounting

WRIGHT

A knowledge of bookkeeping is not required nor is it of advantage. A study is made of the balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions and consolidations; branch store accounting, etc., keeping in view the best modern accounting practice. Eight hours lecture and laboratory.

Three or four units; both semesters.

60A-60B. Advanced Accounting

WRIGHT, EVERT

The second year consists of an intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation, factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory.

Three units; both semesters.

18A-18B. Commercial Law

STANTON

The object of the course in commercial law is to give clearly and concisely the leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions are given, rather than development of those principles. The subjects covered are contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance and wills, with a brief study of evidence.

Three units; both semesters.

100. Economic Theory

Advanced study of demand and supply, production and distribution, and economic welfare. Prerequisite: Economics 1A-1B.

Three units; one semester.

101. History of Economic Thought

The chief contributors to economic theory from the time of Adam Smith to the present day. Prerequisite: Economics 1A-1B.

Three units; one semester.

121. Business Organization

Description and analysis of business corporations, associations, and other forms of combination; differentiation of functions, methods of operation, etc. Prerequisite: Economics 1A-1B.

Three units; one semester. (Not offered in 1928-1929.)

125. Advertising and Salesmanship

Principles and problems.

Three units; one semester. (Not offered in 1928-29.)

131. Public Finance

Principles and practice of taxation, public expenditures, and financial administration.

Three units; one semester.

135. Money and Banking.

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A.

Three units; one semester.

140. Statistical Methods

BR

An introductory study of the statistical measures and devices most commonly used in connection with work in the field of economics. Opportunity will be given to obtain practice in the use of calculating machines and other aids to computation. Prerequisite: Two years of high school algebra.

Two units; both semesters.

141. Economic Geography

(See Geography.)

Social Ethics

COLDWELL

Required of all entering students. This course aims to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society—of women to society. One hour per week for 9 weeks.

Introduction to Social Science

COLDWELL

This course is given with the object of helping the student adapt himself to temporary problems and to give him greater facility in understanding his responsibilities as a member of the family, social group, and a citizen.

It includes those subjects pertaining particularly to human conduct, with a study of the various forces and laws under which present day conditions have been created. Lectures, discussions, collateral reading. Primarily for teacher-training students.

Three units; either semester.

General Sociology

KELLY

The object of the course in sociology is twofold: To familiarize the student with the forces and laws under which society is formed and to bring him so far as possible in touch with specific contemporary problems, so that he may adapt himself with greater facility to his responsibilities as a member of the social group and as a citizen. General sociology includes the study of the antiquity of man, racial evolution, religion, morals, customs, laws, family and state and the biological, economic and psychological aspects of society. Lectures, discussions, quizzes with a text and collateral reading. Not open to freshmen. Prerequisites: Recommended: Economics 1A-1B, Biology 10A-10B and Psychology 2A-2B.

Three units; one semester.

Social Psychology.

(See Psychology.)

Secretarial Training

AMSDEN

1A. Typewriting

A rapid development of a thorough command of a keyboard by the touch method. Acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms, tabulation and billing; specifications, legal forms and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit is given for this course except in the curricula in accountancy and secretarial training. Ten hours lecture and laboratory practice.

Four units; both semesters.

2A. Typewriting

AMSDEN

A short course designed for those who do not wish to enter the business office but desire a knowledge of the use of the typewriter. Five hours laboratory practice. Ordinarily no credit is given for this course.

Two units; either semester.

1B. Stenography

AMSDEN

An intensive course designed for the practical preparation of office secretaries. Thorough study is made of the Gregg System and the ability to read and write shorthand rapidly and correctly, both literary and commercial, is developed. The shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit is given for this course except in the curricula in accountancy and secretarial training.

Five units; both semesters.

2B. Stenography

WRIGHT

Development of speed in writing and transcription. Advance dictation on letters, legal forms, speeches and literary material.

Three units; second semester. (Not offered in 1927-1928.)

Office Methods and Appliances

WRIGHT

Practice and principles of office management, including organization, arrangement and operation. Study and use of modern office appliances, such as the multi-copy, mimeograph, filing devices, calculating and bookkeeping machines. Trips are made to local establishments to study at first hand actual business conditions. Prerequisite: Typewriting 1A or its equivalent.

Three units; second semester.

Business Mathematics

WRIGHT

A practical course in the mathematics of business. The ability to add, subtract, multiply and divide rapidly and accurately is developed. A thorough study is also made of interest, compound interest, discount, amortization tables, insurance rates, etc. Credit is given only in the curricula in Accountancy and Secretarial Training.

No credit; first semester.

EDUCATION

I. Education—Introductory Principles and Technique

JOHNSON, AL

This is the first required course in the study of education and has as its purpose the orienting of the mind of the student toward education and teaching. A preliminary survey of the field is made and of the theories and general principles applying to education in a modern democratic society. It also functions as a course in vocational guidance in that it seeks to acquaint the student with the qualities needed for success in teaching and helps him to appraise his own possibilities.

In the survey of this field of public education a study is also made of public and quasi-public organizations which more or less directly participate in the program of education. Especial note is made of the Parent-Teacher Association and its functions.

Open only to students who have passed the Fundamentals Test.
Three units; either semester.

CI. Principles of Junior High School Education

HARRI

This course deals with the principles of educational science that should underlie the organization, administration and curriculum of the secondary school, especially in the junior high school field. The prevailing patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to that articulation of the secondary school with the lower and higher schools.

This course also functions as a "Comprehensive Examination" of application for the college degree and diploma, which automatically become teaching credentials in California. Seminars are organized for reviewing and integrating the leading contributions to educational theory and practice from the fields of biology (S. Biology 10A-10B), psychology (2A-2C), Sociology (10A), principles and techniques of teaching (I), primary school curriculum (CXXVIII) (for those who also seek the general elementary credential), educational measurements (CVIII), and practice teaching (CXVI). Students who take this course are exempted from course CXL.

Three units; one semester.

CII. Education for Citizenship

NI

An analysis of the ideals and habits essential for good citizenship followed by a study of the part which each school subject and activity contributes to this development.

Two units; either semester.

CIII. Public Education in California

HAI

A study of the structure, organization and administration of the California school system, as given in the school law of the state, and as interpreted by the rulings of the State Superintendent of Public Instruction, the Attorney General and the California courts. It is intended to give to prospective teachers a conception of the historical development and the main features of the California school system.

Two units; either semester.

CXXVIII. Primary School Curriculum

HAMM

A study of the activities of the first three grades of the elementary school. Special emphasis is placed upon beginning reading and frequent demonstration lessons are conducted.

Open only to students who have passed the Fundamentals Test.
Three units; either semester.

CIV. Elementary School Curriculum

A

A study of the materials and activities of the elementary school and of accepted techniques in teaching. A summary and evaluation is made of the results of scientific investigations in this field. Special emphasis is placed on the teaching of English. Open only to students who have passed the Fundamentals Test.

Three units; either semester.

CV. Intelligence Testing

A brief review of the history and rationale of intelligence testing is followed by a discussion of the Stanford revision of the Binet-Simon Test, with demonstration and practice. The best group tests of intelligence are discussed and demonstrated. Experience in giving, scoring and interpreting results is required. The purpose of this course is to give teachers information on the subject, to enable each student to find out if by inclination and endowment he is fitted to do scientific testing and to put him in the way of becoming skilled in giving and interpreting intelligence tests.

Two or three units; one semester.

Principles of Elementary Education

JOHNSON

This course is designed as a culmination of the studies of education and its nature. It is a study of the biological, psychological and social principles underlying modern education, in connection with the demands of modern society in a complex social, economic and scientific world, with a view to the formulation of a guiding philosophy for the educative process.

As in course CI, Principles of Junior High School Education, this course also includes as a "Comprehensive Examination" of applicants for the Teachers College degree with the same arrangements for seminar reviews and tests. Students taking this course must be applicants for the general elementary credential only or those who are applicants for the junior high school credential or both the junior high school and elementary credentials will take course CI instead of this course.

Three units; one semester.

History of Education

JOHNSON, HARDY

The course includes a brief study of early Hebrew, Greek, Roman and early Christian Education, of the changes brought about by the Renaissance, of the transition to modern secular education, and includes brief reviews of the educational philosophies of the great reformers, together with a concluding study of the development of the American school system and of American ideals and practices in education.

Three units; one semester.

II. Educational Measurements

BELL

This course consists of a brief survey of the history of scientific measurement in the elementary field, and a study of the nature of intelligence tests, especially of the practical uses of group intelligence tests. The greatest stress, however, is laid upon the practical uses of achievement tests. The Stanford Achievement Tests given to the Training School and to many college students furnish a great part of the material used. Simple statistical training in handling data is acquired through practical problems. Open only to students who have passed the Fundamentals Test.

Three units; either semester.

Educational Administration and Supervision

JOHNSON

A survey of the systems of organization, classification and promotion of pupils, such problems as finance, the teaching staff, building standards, extra-curricular activities, etc.

Two units; one semester.

Educational Organization and Supervision

JOHNSON

A study of types of supervision and methods of evaluating and improving supervision.

Two units; one semester.

III. Practice Teaching

Systematic observation, participation and actual teaching under competent supervision in the Training School and in the city schools of San Diego. A limited amount is also afforded in rural and ungraded schools.

The general plan for an inexperienced teacher is to take one period of practice teaching daily for a semester and a half day of teaching for another semester. The credit is usually credited with two or three units and the latter with from six to ten units, the amount of credit given in each case depending upon the character of the assignment and the work done. Where more time is needed the student is given additional practice under trained supervision.

The minimum requirement for those who average a B grade in practice teaching is nine units; for others, twelve units. The requirements may be reduced for those who have had successful teaching experience.

Open only to those who have a C average in all college work and a passing grade on the Fundamentals Test.

III. Class Management

CORBETT

A discussion of the problems arising in connection with schoolroom discipline; methods of securing a wholesome school "spirit" and the application of civic principles to school life.

Two units; one semester.

Principles of Secondary Education

HARDY

This course deals with the principles of educational science that should underlie organization, administration and curriculum of the secondary school. The present patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to that of articulation of the secondary school with the junior and higher schools.

Two units; one semester.

CXXX. Educational Psychology

This is a study of the learning process and includes such topics as laws and types of learning, curves of learning and of forgetting, economy of learning, amount and limits of improvement, spread of improvement or transfer and experiment studies in learning. Prerequisite: Psychology 2A and 2C.

CXL. Elementary Statistics

An introductory study of the statistical measures and devices most commonly used in connection with educational work. Data will be taken from typical school conditions. Opportunity will be given to obtain practice in the use of calculating machines and other aids to computation.

Three units; one semester.

The Statutory Curriculum

(Elementary School)

NOTE.—The courses listed under this head do not include reviews of elementary school subject matter. They are professional courses, and presuppose a reasonable mastery of the materials of the elementary school curriculum and of the general curriculum of the secondary school.

XI. Language

This course includes a study of the psychology and hygiene of reading, with study of methods and materials suitable for the equipment of the elementary school teacher, and with a study, also, of the teaching of writing and spelling.

Two units; one semester.

CXXIX. Mathematics

A discussion of the applications of psychology and experimental education to teaching of arithmetic and elementary general mathematics, together with study and observation of the newer methods as used under ordinary classroom conditions.

Two units; either semester.

XIII. Introduction to Geography

This course includes a study of the fundamental principles of Geography and their adaptation to teaching Geography in the elementary schools.

Two units; one semester.

CXXVI. Children's Literature

This is a detailed study of the literature for children as a basis for appreciation, selection and presentation of suitable material for the elementary school grades. It includes practice in story-telling and dramatization.

Two units; either semester.

XV. History

A course in the development of civilization beginning with ancient times, studying the characteristics of successive periods and building a cultural background for the history of the elementary school.

Two units; one semester.

XVII. Music in the Elementary School

Main objectives of music teaching in the public elementary schools. Studying the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing, and part singing.

Prerequisite: Music 1A, Music Fundamentals.

Two units; either semester.

XIX. Art in the Elementary School

Prerequisite: Art 6A or its equivalent. This course is a practical application of the elements and principles of Art to problems for grades 1-6. It is presented through lectures, reports, demonstration lessons and laboratory work.

Two units; either semester.

XXII. Geography Materials for the Elementary School

This course aims to familiarize students with geography texts, geographical readers and other supplementary books, magazines valuable in the work, the different kinds of wall and desk maps, and also with concrete geographical materials such as pictures and exhibits. Prerequisite: Geography 1 or 1A.

Two units; second semester.

COURSES FOR SECONDARY SCHOOL TEACHERS

Organization and Administration (see Education CIX and CX)

English

BAGLEY

This course consists of the following items: (a) Lectures and required papers on the objectives of secondary school work in English and on the selection and interpretation of materials; (b) of the study of methods with respect to pupils and activities; (c) of observation of the work in the city schools. Two units; one semester.

Mathematics

RICHARDS

The subject matter, management of it and methods of teaching it in a junior high school curriculum in general mathematics, make up the principal topics of this course. Specific problems discovered include the application of arithmetic in current life and business life, intuitive geometry, graphic representation and the phase of mathematics suitable to the junior high school pupil, together with the problem of making mathematics useful in preparation for senior high school mathematics. Two units; one semester.

Geography

CLARK

This course deals, first, with the subject matter suitable for secondary schools, particularly the junior high school, and with the arrangement and interpretation of subject matter; second, with the problems of teaching geography in the junior high school grades. Lectures, papers, readings and observations are included. Two units; one semester.

Social Science

This course for prospective junior high school teachers attempts to meet the needs of the teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school teacher through the medium of such social studies in the junior high school curriculum as history, geography and civics. Methods of securing direct experience and training in the junior high school and other survey and study projects, and of developing a continuing and increasing interest in social and civic problems through observation and discussion, will be discussed and illustrated. Two units; one semester.

History

LEONARD, LESLEY

This course is a study of subject matter, organization, materials and methods for the teaching of history in the junior high school. The course includes a study of text books, maps, and other material. Two units; one semester.

Commercial Education in the Secondary School

WRIGHT

This course is a study of the place of commercial education in the general field of vocational education, the objectives of commercial education. A study of methods, use of texts, cooperation with business men. Two units; first semester.

Art in the Junior High School

BENTON

Prerequisite: XIX. This course is for third year Art students working for Special Art Certificate of Elementary and Junior High School grade. 2 units.

A-B-C-D. The Teaching of Science in the Junior High School

This course is a study of the content, methods, field work, textbooks, laboratory work, equipment and reference readings for Junior High School Science. Prerequisite: 18 units of college science.

XX. A. Prerequisite: 18 units of college science including Biology 10A-10B or Biology 1A-1B.

One unit, nine weeks (first quarter).

JOHNSON

XX. B. Prerequisite: 18 units of college science including Biology 10A-10B or Biology 2A-2B.

One unit, nine weeks (second quarter).

COY

XX. C. Prerequisite: 18 units of college science including Physics 2A-2B or Chemistry 2A-2B.

One unit, nine weeks (third quarter).

BAIRD

XX. D. Prerequisite: 18 units of college science including high school or college chemistry.

One unit, nine weeks (fourth quarter).

SKILLING

Organization of Industrial Arts

SCUDDER

Prerequisite: thirty units in Industrial Arts. Two hours per week. Two units; second semester.

CXXIII. Teaching Industrial Arts

Prerequisite: thirty units in Industrial Arts. Five hours per week.
Three units; either semester.

CXXIV. Romance Languages

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value.

Two units; one semester.

CXXVII. Music in the Secondary School

Two units. (Not offered in 1928-29.)

PHYSICAL EDUCATION FOR TEACHERS

CLI. Methods in Formal Activities

TANNER, C. E. PETERSON

(For Elementary and Junior High Schools.)

(a) A systematic study of the principles and technique of teaching physical training activities.

(b) A study of the selection, classification, arrangement and progressive formal activities. The responsibility of the physical instructor toward the problem of age, growth, and sex variations as affected by exercise is stressed.

One unit; one semester.

For descriptions of the courses in Biology, Physiology, Hygiene, etc., required for special certification in Physical Education, see those subjects in the list of general collegiate courses.

CLII. Theory of Teaching and Leadership in Physical Education

A consideration of the elements and the teaching process in Physical Education; the application of Psychology to leadership; the physical, mental and social development of the successful physical instructor.

One unit; one semester.

CLIII. Methods in Play Activities.

C. E. PETERSON

Methods and materials used in intra- and inter-class games, with special reference to mass competition. Problems of classification, selection, organization and management of inter-school contests and relations. Discussion of honor societies, trophies, awards and sportsmanship code.

Three units; one semester.

CLIV. Administration of Physical Education Program in Secondary Schools

A study of interclass and intramural activities, with marked attention to the problem of competition; consideration of games and sports (not specialized athletics) in relation to the interest and physical needs of high school pupils; the relation of the instruction in Physical Education to the moral, social and hygienic problems of the high school.

Two units; one semester.

CLV. Practice Teaching in Physical Education

TANNER, C. E. PETERSON

Skill in teaching games, athletic sports, in the use of Decathlon Events and in gymnastic drills is expected. Training School and College classes used in Practice Teaching. Prerequisites: Theory of Teaching and Leadership course in the Organization of Physical Education Program for the school grades; be taught and a course in Games.

Five units.

CLVI. A-B. Methods in Coaching Competitive Athletics.

The presentation of different systems of teaching competitive athletics in high schools. This course will parallel the major sport in season and time will be devoted to both the theory and practice of the most successful systems.

Two units; both semesters.

ADDITIONAL COURSES IN PHYSICAL EDUCATION

First Semester, 1928-1929

Stunts and Gymnastic Dancing

One-half unit. Third year.

Intramural Sports (Methods)

Two units per semester. Fourth year.

Second Semester, 1928-1929

Physical Sports (Continued)

Two units.

RAW

Physical Aid (Women only)

One unit. Third year.

Physical Leadership

Three units. Fourth year.

TANNER

ENGINEERING

Mechanical Drawing

DE SILVA

This course is designed to train students in lettering and in neatness and accuracy in the use of instruments. Geometric problems, shop problems, theoretical problems with developments, warped surfaces with developments and penetration of solids, prisms, pyramid and prism, cylinder and prism, cone and cylinder, and other problems are studied. Mechanical Drawing C is substantially equivalent to the high school course in Mechanical Drawing.

Three units; either semester.

Descriptive Geometry

STOVAL

In this course 21 or more plates are required and four examinations given. The student deals with the customary problems of points, lines, planes, perpendiculars, projections, distances, angles, solids, developments, warped surfaces, intersections, etc. The aim of the course is to create originality, and to develop the ability of the student to visualize and present on paper problems which are theoretical or practical. Prerequisite: Mechanical Drawing C or the high school course in Mechanical Drawing.

Three units; either semester.

Machine Drawing and Design

STOVAL

Function of machines; motion, force, and work in machines; analysis of mechanism; velocity, acceleration, and effort diagrams; parallel motions, cams; gears; toothed wheels; valve gear and design. Three lectures and two drafting assignments. Prerequisite: Descriptive Geometry 3D.

Five units; second semester.

3. Plane Surveying.

MCINTYRE

Use and adjustment of surveying instruments, computations and map-making, together with a study of land, topographic, city and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisites: Trigonometry and Mechanical Drawing.

Three units; both semesters.

Applied Mechanics

STOVAL

Problems concerning the action of external forces on rigid bodies; composition and resolution of forces; equilibrium; rectilinear and curvilinear motion; acceleration linear and angular; harmonic motion; translation and rotation; moment of inertia; kinetic and potential energy; work, power, friction; machines; efficiency. Prerequisites: Mathematics 3A-3B and Physics 1A-1B.

Three units; first semester.

Elements of Electrical Engineering

STOVAL

A general survey of the field of Electrical Engineering. Single and polyphase circuits, power-factor, reactance, generators, motors, transformers, and transmission lines. Prerequisites: Mathematics 3A-3B and Physics 1C.

Three units; second semester.

ENGLISH

The Major in English—Required: Thirty-six units in English, of which not more than six may be in Journalism and Public Speaking and not more than nine in composition.

The Major (lower division)—English 1A-1B and six units from 56A-56B, 2B. Recommended: A reading knowledge of German or French.

The Major (upper division)—At least fifteen units in upper division courses offered in the junior and senior years.

3. English Composition

BAGLEY, SMITH

The purpose of this course is to develop precision and directness in speaking and writing. A study of models, chosen from modern literature, forms the basis of class discussion and presentation. In 1A the emphasis is on exposition; in 1B on argu-

mentation, description, and narration. Open only to students who have passed English A examination.

Three units; both semesters.

4A-4B. Great Books

A survey of books and bodies of literature that are significant sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic and Tragedy, Norse Eddas, and other literature of religious and communal character; and highly significant masterpieces in poetry and prose by great authors down to the nineteenth century.

Three units; both semesters.

52A-52B. Types of Literature

Introduction of the study of lyrical and narrative poetry; origin and elements of poetry; typical poems.

Three units; first semester.

Introduction to the study of dramatic poetry and prose, the essay, novel, short story; elements, principles and characteristics; examples.

Three units; second semester.

56A-56B. Survey of English Literature.

The aim of this course is to give the student a better acquaintance with examples of English Literature which reveal the development of thought and social ideals from the Anglo-Saxon period to the middle of the nineteenth century. The work consists of readings in the masterpieces, class discussions, occasional quizzes and written reports.

Three units; both semesters. (Not offered in 1928-1929.)

60. Periodical Literature

A study of current literature, in content and form, as presented by leading periodicals, with the purpose of promoting intelligence and discrimination in reading with immediate interest. Discussions and written papers dealing with contemporary essays, fiction and poetry.

Three units; either semester.

101. Modern Prose Fiction

A study of recent and contemporary fiction in drama, novel, and short story beginning with Meredith and including the best British and American fiction of today.

Three units; second semester.

106. Advanced English Composition

A laboratory course in modern writing, with the purpose of developing skill and strength in the composition. A variety of prose forms (excluding the novel and some poetry considered; student may choose one or two forms for intensive practice. Outside readings. Prerequisite: One year of college composition.

Three units; first semester.

117. Shakespeare

Extensive reading of Shakespeare's plays, with special attention to a representative group of the comedies and another of the tragedies. Lectures and special reports.

Three units; first semester.

118. Makers of Eighteenth Century Literature

A study of Pope, Swift, Johnson, Goldsmith, Fielding, Burns, and their contemporaries as interpreters and teachers of their age. Open to upper division students.

Three units; first semester.

121. Browning and His Contemporaries

A study of Tennyson and Browning and their contemporaries and successors relating English poetry to nineteenth century life and thought.

Three units; second semester. (Not offered in 1927-1928.)

130A-130B. American Literature

A survey of American literature and its backgrounds from 1607 to the Civil War.

Three units; first semester.

Recent American literature, with its backgrounds from the Civil War to the present time, giving special attention to the development of prose fiction in the short story and drama.

Three units; second semester.

Medieval Literature

BAGLEY

Study of the literature of the fourteenth century, especially the verse of Chaucer, Piers Plowman, and the poetry of Chaucer. Open to upper division students.

Three units; second semester.

JOURNALISM

The Major in Journalism (lower division): History 4A-4B or 8A-8B, Political Science 1A-1B, English 52A-52B or 56A-56B; Typewriting 2A, Economics 1A-1B, Sociology 2A-2B, Journalism 51A, 51B. Recommended: Social 50, Anthropology 3, English 4, 60, Music 3A-3B or Art 1A-1B, Commercial Law 18A-18B.

The aim of the course in Journalism is twofold: (1) to provide studies in the departments of instruction—English, History, Economics, and Political Science which constitute a foundation essential to the successful pursuit of Journalism as a profession; (2) to offer introductory courses in the principles and practice of Journalism, supplemented by lectures of specialists in the field and by practical work in gathering and writing for student publications and for the local daily press.

News Gathering and Reporting

F. L. SMITH

Study of news sources and practice in news writing. Newspaper organization.

Three units; first semester.

News Editing and Correspondence

F. L. SMITH

Practice in copy-reading. Study of news values and types of newspaper stories.

Three units; second semester.

3B. English-Journalism Applied

SMITH

Credit is earned by actual work throughout a full semester as editor of "The Palenque," or "Del Sudoeste"; or for specified staff work throughout the semester.

One to three units; each semester.

SPEECH ARTS

The Major in Speech Arts (lower division): Public Speaking 1A-1B, Public Speaking 3A and 5A or Public Speaking 55A-55B.

Elements of Public Speaking

WALKER

Training in fundamental processes of oral expression; methods of obtaining organizing material; outlining; principles of attention and delivery; extemporaneous speaking and open forum debating; practice in construction and delivery of forms of speech.

Three units; both semesters.

Advanced Public Speaking

WALKER

Survey of public speaking methods. Study of selections; observation of speaking in community. Organization and delivery of speeches. Analysis of individual speeches in speech making. Participation in a public debate or oratorical contest, the presentation of an equivalent amount of practical speaking before public bodies is required.

The membership of the class is limited to twenty.

Before electing the course students must consult the instructor in charge.

Two units; second semester.

Argumentation and Debate

WALKER

Study of the obtaining and organizing of evidence and the construction and the brief; study and discussion of current issues; the presentation of formal debates. Attention will be given to intramural and intercollegiate debating.

Three units; first semester.

5B. Play Production

JONES

Study of its history and technique. Practical training in acting and producing. Presentation of plays worked out in class. Limited to thirty students.

Three units; both semesters.

5D. Dramatic Workshop

JONES

The making of plays. Students specialize creatively along lines of their individual dramatic interest including presentation of original and standard plays.

Limited to twenty advanced students.

Three units; both semesters.

Stage Design; 52B, Stage Costume; 52C, Stage Craft

See Fine Arts.)

FINE ARTS

The Major in Fine Arts (lower division) : Art A-B, 1A-1B, 6A-6B, 12B.

Art A. Freehand Drawing

Problems involving principles of perspective are given to develop ability draw and technique in pencil, charcoal, etc.
Two units; first semester.

Art B. Freehand Drawing, Painting and Sketching

Drawing from costume pose, outdoor sketching and problems involving use various color mediums. Prerequisite: Art A.
Two units; second semester.

1A. Art History and Appreciation

A study of architecture, sculpture, painting and handicraft from the dawn art to the Renaissance, through illustrated lectures, research and discussion.
Two units; first semester.

1B. Art History and Appreciation

Same procedure as 1A but covering that period from the Renaissance to Modern School.
Two units; second semester.

6A. Art Structure

Theory of design and color. This course is intended to increase appreciation and give a basic understanding of the elements and principles of art as expressed in the architecture, painting, sculpture and crafts of the past and present. time is equally divided between lectures and practical problems.
Two units; either semester.

6B. Art Structure (Continued)

Original, creative work in design with special stress on structural and industrial design and modern tendencies. Prerequisite: 6A.
Two units; either semester.

12A. Advanced Design

Problems in creative design and processes of application through batik, book printing, etc. Prerequisite: 6A-6B.
Two units; first semester. (Not given in 1928-1929.)

12B. Lettering and Posters

Design studied in relation to lettering, illumination and posters. Lettering prearchitecture students included when desired. Prerequisite: 6A.
Two units; second semester.

52A. Stage Design

Theory of line, color and lighting. Original sets and costumes developed the miniature stage. Study of the development of modern art of the theater. course leads to the advanced stage craft course 52C.
Three units; first semester.

52B. Stage Costume (Not offered in 1928-1929.)

52C. Stage Craft

Study of stage terminology and technique. Scene building and decoration. Materials and their treatment for stage effect. Actual experience in setting, tuning and lighting productions. Prerequisite: 52A.
Three units; second semester.

94A. Costume Design

Design studied in relation to modern dress for general and individual problems. The course includes study of foreign and historic influences on dress; original problems; sketching from costumes in the shops and demonstrations with models. Prerequisite: 6A.
Two units; first semester.

94B. History of Costume and Advanced Costume Design

This course is for students working towards special art or home economics certificates of secondary grade. Prerequisite: 94A.
Two units; second semester. (Not given in 1928-1929.)

95A. Home Decoration

Design in relation to the home. House planning and landscaping, interior decoration, study of period furnishing and furniture and their influence through illustrated lectures, research and original problems. Prerequisite: 6A.
Three units; second semester.

Home Decoration

BENTON

Advanced study of decorative textiles and furniture with problems in modern decoration. Prerequisite: 95A.
Two units; second semester. (Not offered in 1928-1929.)

15B. Life Drawing and Painting

BENTON, MOON

15A—Pose drawing from the figure.

15B—Illustration.

Prerequisite: Art A-B.

Two units; both semesters. (Not offered in 1928-1929.)

Teacher-Training Courses

Education: XIX, Art in the Elementary School; XXIX, Art in the Junior School. See, also, Industrial Arts, 61A.

FOREIGN LANGUAGE

The Major in a Foreign Language (lower division): Required: 16 units of in the language chosen for the major. Recommended: History 4A-4B.

The Group Major in Romanic Languages (lower division): French A, B, C, Spanish A, B, C, D.

The Group Major (upper division): Eighteen upper division units in one language or twelve units in one language and six units in the other.

The group major requirements are based on the assumption that the student has taken courses in the high school which are equivalent to the college course in elementary French or Spanish. A student who offers matriculation credit for two years of the high school course in a Romanic language may take a place-test to determine his eligibility for the third semester of the college course.

Elementary German

Pronunciation, reading and grammar, with practice in simple conversation, narration and description, both oral and written.

Elementary German

HEIMERS

Two units; first semester.

Elementary German

HEIMERS

Prerequisite: German A or two years of the high school course in German, or equivalent.

Two units; second semester.

Intermediate and Scientific German

This course furnishes the regular preparation for the upper division courses.

Intermediate and Scientific German

HEIMERS

This course may be taken as a three-unit course in literature or as a five-unit course combining literature and science. Prerequisite: German B with a grade of C or three years of High School German.

Three or five units; first semester.

Intermediate and Scientific German

HEIMERS

Second semester; same as C. Prerequisite: German C with a grade of C or three years of high school German.

Three to five units; second semester.

Elementary French

Intensive study of French grammar and syntax; daily written work discussed; class drill in conversational idiom and pronunciation; reading with oral translation and résumés; dictation; introduction to contemporary prose writers; study of the principles of French prosody, with memory work.

Elementary French

HEIMERS, PHILLIPS

Two units; first semester.

Elementary French

HEIMERS, PHILLIPS

Prerequisite: French A or two years of the high school course in French, or its equivalent.

Two units; second semester.

Intermediate French

Reading and composition; study of standard prose as a basis for class work; oral reading with résumés and written reports in French; study of French vocabulary, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences.

C. Intermediate French

L. P. BROWN, PH

Prerequisite: French B or three years of the high school course in French or its equivalent.

Three units; first semester.

D. Intermediate French

L. P. BROWN, PH

Prerequisite: French C or four years of the high school course in French or its equivalent.

SC. French

Scientific French. Prerequisite: French B or three years of high school French or its equivalent.
Two units; first semester.

SD. French

Scientific French. Prerequisite: French C or four years of high school French or its equivalent.
Two units; second semester.

101A-101B. French

E. M. J

Conversation and Composition. Prerequisite: French D; or its equivalent with grade of C.

102A-102B. Introduction to French Classics

E. M. J

Prerequisite: French D or its equivalent.

Three units; both semesters. (Not offered in 1928-1929.)

105A-105B. Modern French Drama

E. M. J

Plays of Musset, Scutere, Angier, Dumas fils, Pailleron, Brieux, He Maeterlinck, Rostand and others will be read and discussed as to subject matter and technique. Outside reading and reports.

Prerequisite: French D, or consent of instructor.

Three units; both semesters. (Not offered in 1928-1929.)

Elementary Spanish

Intensive study of Spanish grammar and syntax, with daily written class drill in conversational idiom and pronunciation; reading with oral discussion and resúmenes; dictation; introduction to contemporary prose writers; study of principles of Spanish prosody, with memory work.

A. Elementary Spanish

L. P. BROWN, PH

Five units; first semester.

B. Elementary Spanish

L. P. BROWN, PH

Prerequisite: Spanish A or two years of the high school course in Spanish or its equivalent.

Five units; second semester.

Intermediate Spanish

Reading and composition; study of standard prose as basis for class collateral reading in prose and drama, with written reports in Spanish; a study of Spanish prosody, with selections for memorizing; dictation. Class work confined mainly in Spanish. Individual conferences.

C. Intermediate Spanish

L. P. BROWN, PH

Prerequisite: Spanish B or three years of the high school course in Spanish or its equivalent.

Three units; first semester.

D. Intermediate Spanish

L. P. BROWN, PH

Prerequisite: Spanish C or four years of the high school course in Spanish or its equivalent.

Three units; second semester.

101A-101B. Spanish

L. P.

Conversation and composition. Prerequisite: Spanish D, or its equivalent with grade of C.

102A-102B. Introduction to Spanish Classics

L. P.

This course will introduce the student to the several types of classical literature. Reading will be: Gil Blas, and other novels of Roguery; one drama each from works of Lope de Vega, Calderon, Alarcon, and Moreto; selections from Quixote, and the Cien Mejores Poesias Castellanas; collateral reading and reports.

Prerequisite: A grade of C in Spanish D or permission from the instructor.

Three units; both semesters. (Not offered in 1928-1929.)

5B. Modern Spanish Drama

L. P. BROWN

This course will trace the development of the drama of Spain from the beginning of the nineteenth century to the present time.

Prerequisite: A grade of C in Spanish D or permission from the instructor.
Three units; both semesters. (Not offered in 1928-1929.)

10B. Novel and Short Story in Spain

L. P. BROWN

This course will trace the development of the novel and short story in Spain from 1800 to the present time.

Prerequisite: A grade of C in Spanish D or permission from the instructor.
Three units; both semesters. (Not offered in 1928-1929.)

GEOGRAPHY

The major in Geography (lower division): Geography 1, 2, 3, Geology 1A. Required: A reading knowledge of French or German.

The major (upper division): Fifteen units from upper division courses in which the student has completed in the junior and senior years.

In addition to the foregoing requirements two units must be chosen from lower division courses in Geography and nine units (six in the upper division) from the following list of subjects in consultation with the chairman of the department: Anthropology, Economics, Botany, Zoology, Physics, Chemistry, Astronomy, and the History of Europe, History of the Americas.

Introduction to Geography; Elements

CLARK, SUHL

This course deals with the fundamental principles of Geography, with the distribution of life upon the earth and with the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and their uses are related to human activities. Open to all students.

Geography 1, three units; either semester.

Geography 1A, two units; either semester (for teacher-training students).

Introduction to Geography; Natural Regions and the Distribution of Population and of Cultures

CLARK, SUHL

This course applies the fundamental principles of Geography to the various regions of the world. The regions are compared with regard to different stages of development. Prerequisite: Geography 1 or 1A.

Geography 2, three units; either semester.

Geography 2A, two units; either semester (for teacher-training students).

Elementary Meteorology

BLAKE

An elementary study of the earth's atmosphere and changes in it which produce weather and influence human affairs. Special attention will be given to local conditions, instruments and records.

Two units.

Advanced Meteorology

BLAKE

A continuation of Meteorology 3. In addition, this course discusses cyclones and anticyclones, their causes, paths and life histories. Weather maps will be made and used in forecasting, applied meteorology and recent developments in the subject. Prerequisite: Meteorology 3.

Two units.

Geography of Europe

CLARK

This course deals with the physical environment of each of the nations and their relation to the physical environment in their political and social relations. It is designed so as to be of value to all students who wish to familiarize themselves sufficiently with modern Europe to be able to read current periodical literature with interest and understanding. This course introduces the students to the smaller as well as the larger of the European countries. Prerequisite: Geography 1 or 1A.

Three units; second semester.

Vegetation and Climatology

BLAKE

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention is given to the climate of different parts of the United States. Prerequisite: Meteorology 3.

Two units.

Geography of South America

CLARK

This course deals with the climate, topography and natural resources of the South American countries, and with the effect of those physical factors upon the economic, commercial and racial problems of the different nations. Prerequisites: Geography 1 or 1A.

Three units.

121. Geography of North America

A study of the natural regions of North America, their formation, occupation and historical development. Prerequisite: Geography 1 or 1A.
Three units; first semester.

124. Geography of Asia

A study of the cultural regions of Asia, their physical environment and historical development. Prerequisite: Geography 1 or 1A.

141. Economic Geography

A world-wide survey of the raw materials of world trade; their production, distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 or 1A and 2 or 2A.
Three units; first semester.

Geology 1A.

General geology. A study of the surface features of the earth, agencies and processes of change and evolution of topographic forms.
Three units; first semester.

Geology 1B.

Historical geology. Origin and geological history of the earth and animal and plant life. Prerequisite: Geology 1A.
Three units; second semester.

HISTORY

The major in History (lower division): History 4A-4B or 8A-8B or 5A-5B and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. Each student shall take more than one of the three History courses at one time.

Students who wish to major in History and who have had less than two years of European History in the High School must take History 5A-5B or 4A-4B.

The major (upper division): Twenty-four units of upper division work in History to be arranged in consultation with the chairman of the department. Each student must, in his senior year, write a term paper, the subject matter of which shall be arranged in consultation with the department.

4A-4B. History of Modern Europe

The development of Western European Society, politics and institutions from about 1500, A.D., to the present time. The first half-year's work extends to the Congress of Vienna. Library deposit, \$2.50.
Three units; both semesters.

8A-8B. History of the Americas

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis is placed on the planting of European civilization in the western hemisphere, the international contest for the continents, the war of independence, the development of the American republics, and their relations with one another and the rest of the world. The course is based on H. E. F. "Syllabus of the History of the Americas." Library deposit, \$1.75.
Three units; both semesters.

5A-5B. History of England

A survey of the more important political, constitutional and cultural aspects of English development. The course is advised as a preliminary study for students of American history and government. Library deposit, \$2.50.
Three units; both semesters.

111A-111B. Ancient History

A. Greek history to the Roman conquest. B. Roman history to the fifth century.

Three units; both semesters. (Not offered in 1928-1929.)

121A-121B. Medieval History

A general survey of European history from about 500 to 1500 A.D. Library deposit, \$2.50.
Three units; both semesters.

145A-145B. Europe Since 1789

The Revolutionary Era in Europe; the conflict of Reaction and Liberalism; the Industrial Revolution; the development of Nationalism, with special attention to the unification of Germany and Italy; political problems of continental Europe resulting from the World War. Library deposit, \$2.50.
Three units; both semesters.

51B. Diplomatic History of Europe

LESLEY

Study of European diplomatic and colonial policies since 1648, with detailed attention to the basic factors in international organization and procedure. During second semester special emphasis is placed on the period, 1880-1927. Three units; both semesters. (Not offered in 1928-1929.)

56B. History of British Expansion

NASATIR

Study of the growth, development, and break-up of the older overseas empires; the beginnings of the newer Empire after 1783; the rise, federation and relations of the self-governing Dominions; the crown colony system; the British rule; and British expansion in Africa and the Pacific. Three units; both semesters. (Not offered in 1928-1929.)

71B. The Rise of the American Nation

LEONARD

English colonization in North America and the development of colonial institutions and politics. B. The revolutionary movement and the Revolutionary War; the establishment of the government under the Constitution to about 1840. Deposit, \$2.50. Three units; both semesters.

73B. The Expansion of the United States

LEONARD

Study of the Mexican War and the slavery controversy, the Civil War and Reconstruction, and the growth and progress of the United States to about 1920. Three units; both semesters. (Not offered in 1928-1929.)

81B. History of the West

NASATIR

Territorial growth of the United States; the diplomacy and politics of expansion; the settlement and development of the West and the influence of expansion on American institutions and upon international affairs at each stage of the process. Three units; both semesters. (Not offered in 1928-1929.)

HOME ECONOMICS

Household Art

Major in Household Art (lower division) required: High school courses in English and Chemistry or equivalents; Household Art 1A-1B; Art 6A-6B; History 1A-1B or equivalents. Recommended: Economics 1A-1B, Art 12, Psychology 1A-1B, French or German; high school courses in Clothing, Freehand and Mechanical Drawing. History 4A-4B is not required of students who present credit for four years of high school History.

Household Art

LANDERS

Study of clothing problems. The hygiene, artistic and economic aspects of clothing. One lecture or recitation and two laboratory periods per week. Prerequisite: Art 6A, which may be taken concurrently with this course. Three units; first semester.

Clothing and Costume Design, Textiles

LANDERS

Study of costume design with lectures on artistic appreciation, color and materials. Textile study includes a survey of textile fabrics, chemical and physical properties of principles to the selection and construction of clothing. One lecture or recitation and two laboratory periods per week. Prerequisites: Clothing 1A-1B, Art 6B. Art 6B may be taken concurrently with this course. Three units; second semester.

Home Making

COLDWELL

General view of the place of the home in society. Administration of the household. Budgeting of incomes to cover shelter, food, clothing, savings and social life. Field work, assigned reading and theme writing required. Lectures, class discussion, recitations. Three units; either semester. (Not offered in 1928-1929.)

Home Accounting

COLDWELL

Basic principles of administering household finances. Budgeting the moderate income; keeping accounts; banking methods; home management. Saving and investing. Three units; second semester. (Not offered in 1928-1929.)

Hat Making

LANDERS

Designing of hats, frames, trimmings, etc. Application of principle of design. Prerequisite: Art 6A. Art 6A may be taken concurrently with this course. Recommended: Art 6B. Three units; first semester. (Not offered in 1928-1929.)

Household Science

The Major in Household Science (lower division) : Household Science 1A-Chemistry 1A-1B, 8, Economics 1A-1B.

1A. Food Economics

Principles of selecting and preparing foods. A study of Composition, product preservation, nutrition value, digestibility, flavor and cost of foods. One lecture recitation and two laboratory periods per week.

Three units; first semester.

1B. Food Economics

Principles of diet applied to individual family and special group. The planning and serving of meals. One lecture or recitation and two laboratory periods per week.

Three units; second semester.

2. Dietetics

An analysis of food with special reference to needs of special group. Prerequisites: Food Economics 1A-1B.

Two units; second semester.

HYGIENE

C. E. PETER

1. Hygiene and First Aid

An informational course in personal and community Hygiene required of all in the freshman year taking work in the Liberal Arts curricula. The course includes a study of Sex Hygiene and of the Hygienic Principles of Exercise, Bathing, Sleep. Civic Hygiene is vitalized through investigations by each student of special topics, the means by which the health of the local community is protected improved, providing subjects for special study. Lectures, reference reading, special topics, discussions, oral and written quiz.

One unit; either semester.

2. Hygiene and First Aid

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social Hygiene is studied in its relations to the practical problems of young women and prospective home makers. Laws and procedure in local civic health matters of particular interest to women studied in detail. Reports following personal investigation of at least three new topics are required for each member, these reports being given and discussed by the class. Required of all women in the freshman year taking work in the Liberal Arts curricula.

Two units; either semester.

INDUSTRIAL ARTS

A special junior high credential in Shopwork may be obtained as well as general junior high degree in four years attendance if electives are carefully chosen. requirements for a teaching credential in occupations and Home Mechanics page 20.

1. Woodwork (Benchwork in Wood)

Five hours per week.

Two units; second semester.

2. Painting and Finishing

Prerequisite: 1A-1B. Five hours per week.

Two units; second semester.

3. Mechanical Drawing

Nine hours per week.

Three units.

4. Wood Turning

Prerequisites: 1A-1B, 2. Five hours per week.

Three units,

5. Cabinet Work

Prerequisites: 1A-1B, 2, 4. Nine hours per week.

Three units; second semester.

6. Upholstering

Prerequisites: 1A-1B, 2, 3. Five hours per week.

Two units.

Concrete Work	DESILVA
Five hours per week. Two units; first semester.	
Pattern Making	SCUDDER
Five hours per week. Two units; first semester.	
Pattern Making	SCUDDER
Prerequisite: 8A. Five hours per week. Two units; second semester.	
Sheet Metal	DESILVA
Prerequisite: 3. Five hours per week. Two units.	
Shop Drawing; Linear and Shadow Perspective	
Prerequisite: 3. Nine weeks. One unit; second semester. Five hours per week.	
Machine Drawing	
Prerequisite: 3. Nine hours per week. Three units.	
Automobile Mechanics	DESILVA
Ten hours per week. Four units.	
Lettering	DESILVA
Prerequisite: 3. Three hours per week. One unit.	
Elements of Industrial Arts	BENTON
Practical problems in the handling of industrial materials such as clay model- and pottery, paper making, bookbinding, weaving, basketry. Also the study of ed subject matter and the use of industrial arts information and skills. Two units; either semester.	
Elements of Industrial Arts	SCUDDER
Practical problems in the handling of industrial materials involving tool and nably operations in wood, sheet metal and concrete. Supplies and materials for ous projects and the relation and contribution of industrial arts to other activi- Industrial arts as contributing to the evolution of civilization. Two units; either semester.	
Auto Repair	DESILVA
Prerequisites: 13, 14, 15. Ten hours per week. Four units.	
Advanced Cabinet Work	SCUDDER
Prerequisite: 5. Ten hours per week. Four units.	

Teacher-Training Courses

See Education CXXII, Organization of Industrial Arts; and CXXIII, Teach-
industrial Arts.

MATHEMATICS

he Major in Mathematics (lower division) required: Mathematics 3A, 3B,
B, and 6. Recommended: Physics 2A-2B or 1A-1B and a reading knowledge
rench and German.

Plane Trigonometry LIVINGSTON
Logarithms, solution of triangles, trigonometric functions and relations. Pre-
sites: One and one-half years of high school Algebra.
Two units; second semester.

Intermediate Algebra LIVINGSTON
Functions and graphs, theory of quadratic equations, binomial theorem, loga-
is, progressions. Prerequisites: One and one-half years of high school Algebra.
Two units; first semester.

2. Mathematics of Investment

Interest and annuities; amortization; sinking funds; valuation of bonds; depreciation; mathematics of building and loan associations; mathematics of insurance. Prerequisites: Plane Trigonometry and two years of high school Algebra, or Mathematics 1.

Three units; first semester.

3A. Introduction to Analysis

An introduction to the fundamental ideas of differential and integral calculus together with a wide range of applications. Through separate sections, the course ministers to the particular needs of students in Letters and Science and in Engineering. Prerequisites: Plane Trigonometry and one and one-half years of high school Algebra.

Three units; first semester.

3B. Analysis

Analytic geometry, differentiation of algebraic and transcendental functions and applications. Separate sections for students in Letters and Science and in Engineering. Prerequisite: Mathematics 3A.

Three units; second semester.

4A-4B. Engineering Mathematics

This course includes analytic geometry, both plane and solid; calculus, differential and integral, with special emphasis on their practical use in engineering work.

Three units; both semesters.

5A-5B. Higher Analysis

A unified course in algebra, trigonometry, analytic geometry and calculus applications in the life sciences, social sciences and physical sciences. The application of a good technique is emphasized. Prerequisite: Mathematics 3A and 3B.

Three units; both semesters.

6. Introduction to Projective Geometry

The construction and study of conic sections by means of perspectives, and polars and involutions. Prerequisite: Plane Trigonometry.

Three units; second semester.

101. Elementary Geometry for Advanced Students

The critical parts of geometry are examined from the point of view of mathematics. Primarily for prospective teachers. Prerequisites: Mathematics 3B and 6.

Three units; first semester. (Not offered in 1928-1929.)

102. Elementary Algebra for Advanced Students

The critical parts of Algebra are examined from the point of view of mathematics. Primarily for prospective teachers. Prerequisites: Mathematics 3B and 6.

Three units; second semester. (Not offered in 1928-1929.)

111. Theory of Equations

General solutions of algebraic equations; approximate numerical solutions and applications. Prerequisites: Mathematics 5A-5B.

Three units; first semester.

112. Analytic Geometry of Space

Planes, lines and quadric surfaces. Prerequisites: Mathematics 5A-5B.

Three units; second semester.

MUSIC

The major in Music (lower division): Music 1A-1B, 3A-3B, 4A-4B, and 5A-5B. These courses are arranged with a particular view to offering everything in the required preparation for the Secondary Credential in Music. Special assignments will be made for the required work in "applied music"—voice, piano, and other instruments.

1A. Sight Singing and Ear Training

This is the first semester of the course "Music 1A-1B—Sight Singing and Ear Training." It includes, besides training and drill in sight singing and ear training, the elements and materials of music; elementary musical theory; musical and modes of performance; with considerable listening to music by means of phonograph. Prerequisite to all music teaching courses.

Two units.

Sight Singing and Ear Training

L. D. SMITH

The first semester of this course, specially designated "Music Fundamentals," is prerequisite to all courses training for music teaching.

Two units; both semesters.

D. Sight Singing and Ear Training, Advanced

L. D. SMITH

Two units; both semesters. (Not offered in 1928-1929.)

Appreciation of Music

BEIDLEMAN

How and of what music is made. How to listen to, enjoy, and appreciate it. Rated with numerous phonograph records. A general, fundamental, and non-technical course, requiring no previous musical training or background.

Two units; either semester.

B. History of Music

BEIDLEMAN

The development of music from the earliest times, with a particular effort to some acquaintance with the music of the various periods and composers by actually listening to examples of it.

Two units; both semesters.

3. Harmony (Elementary)

L. D. SMITH

Scale construction, intervals, chords, structure, modulation, through various of seventh chord. Especial attention is paid to the keyboard application of chords in harmonization, transposition, and modulation. Prerequisite: 1A, or equivalent.

Three units; both semesters.

3. Applied (Advanced) Harmony

BEIDLEMAN

Completion of harmonic theory—modulation, inharmonic tones, etc. Musical and elementary musical composition. Harmonic and form analysis. Polyphonic treatment of harmony. Prerequisite: 4A-4B.

Two units; both semesters.

Conducting

BEIDLEMAN

The technique of the baton. Methods and materials for use in directing choral and instrumental organizations. Prerequisite: 1A-1B, or 4A-4B.

Two units; first semester.

Orchestration

BEIDLEMAN

Theory and practice of arranging music for instrumental combinations. Prerequisite: 4A-4B.

Two units; second semester.

Musical Organizations

Clef (Women's) Glee Club

L. D. SMITH

Membership based on competitive try-outs.

One-half unit; either semester.

Glee Club

BEIDLEMAN

Membership based on competitive try-outs.

One-half unit; either semester.

Chorus

BEIDLEMAN

One-half unit; either semester.

Teacher-Training Courses

Physical Education: XVII, Music in the Elementary School; CXXVII, Music in the High School.

ORIENTATION

A. G. PETERSON

Orientation course planned to furnish educational guidance and to encourage a proper attitude in the analysis and solution of problems in the field of human living. Lectures and collateral reading. Required of all freshmen in the College of Liberal Arts.

One unit; either semester.

PHYSICAL EDUCATION

Group Major in Physical Education and Hygiene (lower division) required: School Chemistry, Biology 10A-10B, Physiology A, Economics 1A-1B, History 2A. Recommended: German or French, Public Speaking 1A-1B.

Physical Education for Men

C. E. PETERSON

Two-hour course required for the two years of lower division work. Physical Education is given each student when entering and special attention is given to correcting postural faults. In addition to the body building work given in the class

periods, physical efficiency tests embracing agility, defense and swimming are given each semester. During the two years a playing knowledge of the major and minor sports is given and fundamentals of boxing and wrestling taught each student.

- 1A, B, C, or D. Physical Education. One-half unit; both semesters.
- 13A or B. American Football. One-half unit; first semester.
- 3A or B. Track. One-half unit; second semester.
- 4A. Baseball. One-half unit; second semester.
- 5A or B. Basketball. One-half unit; second semester.
- 6A or B. Tennis. One-half unit; either semester.
- 7A or B. Boxing. One-half unit; either semester.
- 8A or B. Wrestling. One-half unit; either semester.
- 10A, B, C or D. Swimming. One-half unit; either semester.

Physical Education for Women

TANNER,

Students are given a health and physical examination, the physical activity prescribed being based upon the data thus obtained. Two hours weekly of physical training are required of all women students, the chief purpose being to develop a knowledge of and interest in suitable sports and games, that have vigorous exercises may be promoted.

Intra-mural sports are encouraged, particularly those of inter-class nature.

52A-52B. Physical Education. Prescribed courses for freshmen.

One-half unit; both semesters.

52C-52D. Physical Education. Prescribed courses for sophomores.

One-half unit; both semesters.

51. Health Education

A course for teacher-training students which includes the study of the common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear in the school; and the elements which underlie a health education program. Methods of presenting personal group health to children of different ages. Hygiene of the school room, seating, lighting and ventilation.

Two units; either semester.

52. Play Activities

The required Physical Education for the second semester consists of the playing of a large range of games. The course does not deal with highly specialized athletics. (For teacher-training students.)

One-half unit; either semester.

53. Administration of Physical Education Program in Elementary and Junior High Schools

Materials and methods noted in the state program of Physical Education are studied. Emphasis is placed upon athletic tests, group activities under leadership, the administration of the "relief" and play periods and the methods of securing better postures. Standards and practices in health measurement applicable to elementary school children, and the treatment of school emergencies are included. Lectures, demonstrations and individual study of important problems. (For teacher-training students.)

Two units; either semester.

101. First Aid and Bandaging

C. E. P.

Proper care of injuries received on the playground and athletic field. Principles of bandaging and first principles of massage used in athletic training.

One unit; first semester.

Teacher-Training Courses

See Education: CLI, Methods in Formal Activities; CLII, Theory of Leadership and Leadership in Physical Education; CLIII, Methods in Play Activities; CLIV, Administration of Physical Education; Program in Secondary Schools; CLV, Physical Education Teaching in Physical Education; CLVI, Methods in Coaching Coaches in Athletics.

PHYSICS

The Major in Physics (lower division). Required: Physics 1A-1B and Chemistry 1A-1B; Mathematics C, 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

1A-1B. General Physics

Mechanics, properties of matter, and heat. This course aims at a development of the fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. The work is presented in

assignments, problem sets and experimental laboratory work. Two lectures and laboratory period each week. Prerequisites: High school physics or chemistry trigonometry.

Three units; both semesters.

2. General Physics

BAIRD

This course is a continuation of Physics 1A-1B for students in the sophomore year, and includes magnetism, electricity, sound and light. Two lectures and laboratory period each week.

Three units; both semesters.

3. General Physics

BAIRD

Properties of matter, mechanics, heat, sound, light, electricity and magnetism, engineering course. Lectures, demonstrations and discussions. Prerequisite: Years of high school mathematics.

Three units; both semesters.

4. Physical Measurements

BAIRD

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity and magnetism. These exercises are usually taken in conjunction with Physics 2A-2B.

One unit; both semesters.

Electrical Measurements

BAIRD

Devoted mainly to the study of potentiometer methods, capacity, inductance, resistance, and magnetic flux. One lecture and two laboratory periods each week. Prerequisite: Eight units in physics.

Three units; first semester.

Modern Physics

BAIRD

An introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity in gases, radiation and the quantum theory. Prerequisite: Eight units in physics.

Three units; second semester.

PHYSIOLOGY

Human Physiology

COY

Study of the human body. Lectures and laboratory exercises on the physiology of the several systems of organs with emphasis on the applications to hygiene and physical education. A brief survey of human histology and a vertebrate dissection furnish the necessary facts of structure. An elective for teachers college students, classified as a natural science.

Four units; first semester.

POLITICAL SCIENCE

Major in Political Science (lower division): Political Science 1A-1B and History 1A-1B or History 4A-4B or Geography 1 and 2. High school Civics supposed in the following courses.

Comparative Government

LEONARD

Comparative study of typical European governments and the government of the United States. The first semester, England, France, Germany, Italy and Japan. The second semester, the lesser European states and the United States. Library deposit, \$2.50.

Three units; both semesters.

Constitution of the United States

W. E. JOHNSON

This course is planned to meet the requirements of the state law for the certification of teachers. The origins, principles and development of the Constitution.

Library deposit, \$2.00.

Two units; first semester.

Theory of the State

LEONARD

The nature of the state, its organization and activities, and its relation to international affairs and to other states.

Library deposit, \$2.50.

Three units; first semester.

American Political Ideals

LEONARD

Underlying theories and principles of American governmental policy.

Library deposit, \$2.50.

Three units; second semester.

PSYCHOLOGY

The Major in Psychology (lower division). Required: Psychology 2A and Zoology 1A-1B or Biology 10A-10B. Recommended: French, German, Chemistry, Physics.

2A. General Psychology (for Liberal Arts students)

An introductory survey of the entire field of psychology. In the study of no adult human behavior, and the factors which condition it, a conservative position is taken, leaving the student as nearly as possible unbiased toward the special schools of psychology.

Three units; first semester.

2A. General Psychology (for Education students)

BELL, JOHN

An introductory survey of the entire field of psychology. The fundamental facts of human behavior and the facts conditioning it are given with special emphasis upon such problems as original endowment, the learning process, work and fatigue and individual differences in their relation to education.

Three units; both semesters.

2B. Applied Psychology

A general survey of the results of modern psychology applied to self-improvement, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in these fields between scientific, legitimate psychology and the pseudo-psychology that is popular because of its simplicity and plausibility or because of its mysticism.

Three units; second semester.

2C. Genetic Psychology—Growth and Development of the Child

JOHNSON, JOHN

A study of the mental and physical growth and development of the child. Special emphasis is given to norms of structure and function as a basis for interpretation of variations from them. Behavior problems and the growth of personality traits and conditioning factors of physical and mental hygiene are stressed.

Three units; second semester.

145. Social Psychology

JOHNSON, JOHN

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, the crowd, public opinion, control, etc. Prerequisite: Psychology 2A.

Three units; second semester.

ZOOLOGY

(See Biological Science.)

1929/30

San Diego State College Bulletin

AND

Announcement of Courses

1929-1930



June, 1929

CALIFORNIA STATE PRINTING OFFICE
SACRAMENTO, 1929

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No. 2

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

STATE DEPARTMENT OF EDUCATION

ERLING KERSEY	- - - - -	Superintendent of Public Instruction
M. H. COHN	- - - - -	ex officio Director of Education
	- - - - -	Deputy Director of Education

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FACULTY

ARD L. HARDY, President. School Administration. B.L., University of Wisconsin; M.A., University of Chicago; LL.D., LaVerne College; Study of European secondary schools, 1898-1899; Principal San Diego High School, 1906-1910. (Appointed September 1, 1910.)

NG E. OUTCALT, Vice President and Professor of English. Student, University of Illinois; A.B., Stanford University; M.A., Stanford University; graduate student, Stanford University; Head Department of English, San Diego High School; travel in Europe, 1910-1911; research work, Stanford University, 1921-1922. (Appointed September 1, 1912.)

LIS E. JOHNSON, Dean of Education. Director of Summer Sessions. Professor of Education. Graduate of State Normal School, St. Cloud, Minnesota; Ph.B., A.M., Illinois Wesleyan University; A. B., A.M., Ph.D., University of Minnesota; Sc.D., South Dakota State College; LL.D., Dakota Wesleyan University. Taught in rural, village and city schools, state normal schools and universities. President of State normal schools at Ellendale, North Dakota, and Aberdeen, South Dakota, and of South Dakota State College, Brookings. Member of staffs of the educational surveys of Virginia and Alabama. (Appointed April 1, 1924.)

HUR G. PETERSON, Dean of Liberal Arts, ex officio in general charge of lower division studies. Professor of Economics. A.B., College of the Pacific; M.A., Stanford University; Vice Principal San Diego High School and Director of Junior College, 1919, 1920, 1921. (Appointed September 1, 1921.)

. ADA HUGHES COLDWELL, Dean of Women. Student Hopkins Art School, San Francisco; Special Study in Europe; Grade Teacher, Alameda, California, six years; Student California Medical College, San Francisco; Licensed Pharmacist, State of California; special study, Columbia University; Head of Home Economics Department, University of Montana, Summer Session, 1915. (Appointed Head of Home Economics Department September, 1907; appointed Dean of Women June, 1915.)

RGIA C. AMSDEN, Assistant Professor of Commerce. Gregg School, Chicago; special secretarial training in various institutions; University of California summer session and extension division work; Teacher in University of California summer school, 1918; traveling representative and secretary for the Federal Board for Vocational Education, France, World War; in charge of stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant editor and reporter, Ypsilanti, Michigan, Daily Press; Instructor, San Diego High School, 1909-1924. (Appointed September 1, 1925.)

V. AULT, Principal of the Training School and Associate Professor of Education. Undergraduate work at Miami University and Valparaiso University, B.S. Graduate work at the University of Iowa and the University of South Dakota. M.A. Superintendent of city schools twelve years; conductor and instructor in teachers institutes; professor of Education at Southern State Teachers College, Springfield, South Dakota, 1922-1924. (Appointed September 1, 1925.)

H G. BAGLEY, Assistant Professor of English. A.B., University of Michigan; A.M., University of California; graduate study, University of Illinois and Columbia University; Head Department of English, State Normal School, Oshkosh, Wisconsin; Instructor, San Diego Junior College, 1919-1921. (Appointed September 1, 1921.)

V. BAIRD, Associate Professor of Physics. A.B., University of Wisconsin; M.A., University of California; graduate study, University of Minnesota. (Appointed September 1, 1921.)

D BEIDLEMAN, Assistant Professor of Music. B.S., Columbia University, 1914; B. Mus., Columbia, 1915. Teacher of music, Boys High School, Brooklyn, N. Y., 1916. Instructor, Columbia, 1917-1919; head of violin department, University of Illinois, 1920-1921; assistant professor of music, University of North Dakota, 1921-1924; professor of music and director of the Conservatory, College of Puget Sound, Tacoma, Washington, 1924-1927. (Appointed May, 1927.)

. GERTRUDE SUMPTON BELL, Associate professor of Psychology. Tests and Measurements. A.B., Indiana University; M.A., Stanford University; graduate Indiana State Normal School; research work, Clark University; Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University. (Appointed August 1, 1916.)

- MARY BENTON, Associate Professor of Art. Student at Rosemont Dezailey, Lusanne, Switzerland; at Chicago Art Institute; at New York School of Art at Teachers College, Columbia University; pupil of W. J. Whittmore, miniaturist painter, and of Sara Butterworth, craftsman. (Appointed July 1, 1916.)
- ELIZABETH MCPIKE BROWN, Assistant Professor of French. Ph.B., M.A., University of Chicago; Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France; Certificate d'Etudes Françaises, University of Paris. Assistant French, University of Chicago, 1918-1920; summer quarter, 1922; Head of French Department, Rockford College, Rockford, Illinois; Instructor in University of California, Extension Division, San Diego. (Appointed September 1, 1926.)
- LESLIE P. BROWN, Associate Professor of Spanish. A.B., Yale University; M.A., Harvard University. Instructor in French and Spanish, Northwestern University, 1913-1915; Instructor in Harvard University, 1916-1917; Instructor in University of North Carolina, 1917-1918; Instructor in University of Chicago, 1918-1922. (Appointed July 1, 1922.)
- M. EUSTACE BROOM, Assistant Professor of Education. Student, University of Chicago. A.B. and M.A., University of Illinois. Assistant in Psychology, University of Illinois, one year; Teacher in Illinois high schools, two years; Superintendent of Schools, Illinois and West Virginia, three years; Instructor in Education, Extension Division, Concord State Normal School, West Virginia, one year; graduate student, University of Southern California; Teacher, Francis W. Parker School of San Diego, two and one-half years; Associate Editor, *The High School Teacher*. (Appointed February 1, 1928.)
- VINNIE B. CLARK, Associate Professor of Geography. A.B., University of Wisconsin. Graduate student, University of Chicago; Assistant in Geography, University of Wisconsin; Oak Park, Ill., High School, 1913-1914; travel in Mexico and graduate study, University of Mexico, 1922; Summer Session Instructor, University of California, Southern Branch, 1923; travel in Europe, 1924. (Appointed September 1, 1914.)
- KATHERINE E. CORBETT, Training Supervisor and Assistant Professor of Education. B.Pd., Michigan State College; B.S., and A.M., Teachers College, Columbia University; graduate Public School Music course, Ypsilanti Conservatory of Music; Teacher in Public Schools, Ypsilanti; special teacher in Americanization course; Training Supervisor, Kent State Normal College, Ohio. (Appointed July 1, 1921.)
- J. GRANT CRAMER, Assistant Professor of Modern Languages. A.B. and M.A., New York University; two years study at Columbia Law School; two years study at the University of Leipzig, Germany; twenty years residence, travel and study in Europe; Instructor French and German, Lehigh University, Bethlehem, Pennsylvania; Associate Professor, Modern Language Department, Boston University; August, 1917, to March 1919, Captain of Infantry, U. S. Army, Military Intelligence Division. (Appointed September 1, 1928.)
- LESLIE S. EVERTS, Accounting. B.L., University of Wisconsin; C.P.A., California; Wisconsin; Public Accountant in Milwaukee, Wisconsin, and San Diego, California, 1909. (Appointed September 1, 1921.)
- WALDO H. FURGASON,* Biology, B.A., St. Olaf College, Northfield, Minnesota, 1924; Teaching Fellow, 1923-1924; Diploma St. Olaf School of Music, 1924; Instructor in Music, Roosevelt Junior High School, San Diego, 1925-1926; graduate study, University of Southern California, summers of 1925 and 1926. (Appointed September 1, 1926.)
- GEORGIA COY FURLONG,* Professor of Botany. Graduate San Diego Normal School, Teacher in San Diego County School, 1909-1910; B.S., Columbia University, M.S., Ph.D., University of Chicago; Bachelor's Training Diploma in Biology, Teachers College, Columbia University; graduate work at University of California, 1915. (Appointed September 1, 1912.)
- WALLACE A. GILKEY,* Assistant Professor of Chemistry. A.B. and C.B. (Chemical Engineer) at Stanford University; graduate student, Stanford University; Instructor at Seale Military Academy, spring of 1922; employed two years in chemical engineering with the Santa Cruz Portland Cement Company in Cottrell Precipitation Plant; the American Smelting and Refining Company as laboratory chemist; and the Refinery of Standard Oil Company, Segundo, California, as chemical engineer and petroleum inspector. (Appointed September 1, 1925.)

* On leave of absence 1928-1929.

C. HAMMACK, Training Supervisor and Assistant Professor of Education. Graduate State Normal School of San Diego; B.A., State Teachers College of San Jose; professional study at University of California; Public School Teacher, five years. (Appointed February 1, 1911.)

HY R. HARVEY, Biology. A.B., San Diego State College; M.A., University of Southern California; graduate work in Biology at Scripps Biological Institute, La Jolla, at the University of California; public school teaching, five years. Appointed September 1, 1924.)

T D. HARWOOD, Assistant Professor of Zoology. A.B., Pomona College; Ph.D., Cornell University; Assistant in Biology, Cornell University, 1920-1921; Field Entomologist, Natural Survey of Illinois, 1921-1922; Teacher, Kern County Union High School and Junior College, Bakersfield, 1922-1925; Assistant in Entomology, Cornell University, 1925-1928; Stream Survey, Conservation Department, New York, 1927. (Appointed September 1, 1928.)

JEANETTE VEASEY JOHNSON, Registrar. Assistant Professor of Culture History. B.S., Radcliffe College; A.M., Columbia University; four years teaching experience; three years an assistant in the Registrar's office, Teachers College, Columbia University. (Appointed July 1, 1927.)

ELIZABETH JOHNSON, Professor of Biology. B.S., M.S., Ph.D., University of California; Research Assistant, Scripps Biological Institute, La Jolla, California; Instructor, Pasadena High School, 1912-1921. (Appointed September, 1921.)

ELIZA JONES, Assistant Professor of English. B.L., M.L., University of California. Director Junior Players of Pasadena Community Playhouse; Drama Instructor in Chouinard Art School, Los Angeles; Organizing Secretary and Instructor in Play Writing of Summer Art Colony at Pasadena Community Playhouse; Drama Organizer and Director of San Diego Community Service. Appointed September 1, 1925.)

JEVE KELLY, Sociology. A.B., University of California; A.M., Columbia University; Los Angeles Public Library School, one year; teacher at Corcoran Union High School; Librarian at Northern Arizona Normal School, Flagstaff; Librarian at Scripps Foundation for Research in Population Problems, Oxford, Ohio. (Appointed September 1, 1924.)

VERE KOTTER, Training Supervisor and Assistant Professor of Education. B.S., Utah Agricultural College; M.A., Stanford University; advanced graduate work, Stanford University, 1926-1928; professional study, University of California and Teachers College, Columbia University. Teacher in public schools; primary supervisor; professor of elementary education. (Appointed July 1, 1928.)

DORIE E. LANDERS, Assistant Professor of Home Economics. A.B., Stanford University; Special Certificate Home Economics, Santa Barbara State Teachers College; Head Department Home Economics, San Juan Union High School; Assistant Dietitian, Fabiola Hospital, Oakland, California, 1918; Home Economics, McKinley High School, Honolulu, T. H.; Kern County Union High School, Bakersfield, California. (Appointed September 1, 1924.)

LES B. LEONARD, Professor of History. A.B., M.A., Ph.D., University of California; graduate study, three years at University of California; Instructor in History, Lowell High School, San Francisco. Teaching Fellow in History, University of California, 1924-1926. (Appointed September 1, 1921.)

B. LESLEY,* Assistant Professor of History. A.B., Stanford University; M.A., University of California; Instructor, Principia School, St Louis, Mo., 1920-1921; Teaching Fellow in History, University of California, 1922-1923; Gifford and Sons' Traveling Fellow in Europe from University of California, 1923-1924; Acting Assistant Professor of American History, Pomona College, 1925-1926. (Appointed September 1, 1924.)

E R. LIVINGSTON, Assistant Professor of Mathematics. B.S., M.A., University of California; Instructor, San Diego Junior College, 1914-1918; Head of Department of Mathematics, Santa Barbara Junior College, 1919-1921. Appointed September 1, 1921.)

leave of absence, 1928-1929.

- RICHARD S. MCINTYRE, Assistant Professor of Engineering. B.S. (Mining); 1 (Petroleum Engineering) University of California; Mining Engineer, Bu Mines, Ltd., Burma, India, 1916-1918; Construction Engineer, Burma M. Ltd., Bengal, India, 1918-1919; Mining Engineer Chemist and Mill Foreer Grecia Mines, Ltd., Nicaragua, C. A., 1919-1921; Mine examination w California and Old Mexico; Senior Instructor University of California, Mi and Petroleum Engineering, 1922-1926; Petroleum Engineer, Standard Company of California; oil-shale research, U. S. Bureau of Mines, Colo; Head of Science and Mathematics Department, Taft High School and Ju College, 1926-1927. (Appointed July 1, 1927.)
- MARY RANKIN MOON, Fine Arts, A.B., University of California. Student at Diego State College and Colorado Springs Academy of Fine Arts. (Appoi September 1, 1926.)
- ABRAHAM P. NASATIR, Assistant Professor of History. A.B., M.A., Ph.D., Uni sity of California; Assistant Teaching Fellow in History, University of C fornia, 1920-1926. Native Sons' Traveling Fellow in History (in Euro 1924-1925; Instructor in History, State University of Iowa, 1926-1927.
- WILLIAM L. NIDA, Associate Professor of Education, Supervisor of Public Se Practice Teaching and Appointment Secretary. Ph.B., Ohio State Univers graduate student, University of Chicago; M.A., University of Southern C fornia; Principal of Ohio High Schools, nine years; Superintendent of Scho seventeen years, Illinois; Supervisor Junior High Schools, San Diego, C fornia, two years. (Appointed July 1, 1921.)
- CHARLES E. PETERSON, Assistant Professor of Physical Education. Director Physical Education for Men; student at Oregon Agricultural College, University of California and the State Normal School of San Diego; stu two years under Robert Krohn; Director of Playgrounds, Y. M. C. A. Phys Education, Physical Education and Recreation in United States Army can Berkeley School System. (Appointed July 1, 1921.)
- WALTER T. PHILLIPS, Assistant professor of Spanish and French. A.B., Unive of Washington; M.A., Stanford University; teaching assistant in Spanish university graduate scholarship in Spanish, Stanford University; graduate st University of California; Assistant Professor of Modern Languages, Willam University. (Appointed September 1, 1927.)
- LEO FRANCIS PIERCE, Professor of Chemistry. B.S., Grinnell College; M. Tulane University; Ph.D., Stanford University; Research Assistant, Instructor, University of Idaho; Professor of Chemistry, Washburn Coll Instructor and graduate student, Tulane University; University Fellows Stanford University; Deutsche Chemische Gesellschaft; Lecturer in Chemis Mercy Hospital, San Diego, California. (Appointed September 1, 1923.)
- ALICE M. RAW, Physical Education. A.B., University of Southern Califor graduate student, University of Southern California, four summer sessi (Appointed September 1, 1923.)
- MABEL M. RICHARDS, Training Supervisor and Assistant Professor of Educat B.S., and A.M., University of Missouri; graduate student, University Southern California; Rural School, City School and High School Teacher; Superintendent of Schools, six years; Supervisor of Mathematics, Trai School, State Teachers College, Warrensburg, Missouri; Director in Den stration School, Northeast Missouri State Teachers College, two ye (Appointed September 1, 1921.)
- CHARLES R. SCUDDER, Associate Professor of Industrial Arts, University of Illin State Normal School, Bellingham Washington; A.B., State Teachers Colleg San Diego; Teacher of Industrial Work at East Chicago, Indiana; Gr Rapids, Michigan; Director Industrial Arts at Evanston, Illinois; Mu Normal Institute, Muncie, Indiana; State Normal School, Bellingham, W ington. (Appointed September, 1918.)
- W. T. SKILLING, Associate Professor of Astronomy, State Normal School, Angeles; Teacher in Los Angeles county and city public schools five ye student at Stanford University one year; B.S., M.S., University of Californ Assistant in Physics, University of California, 1899-1901. (Appointed S tember, 1901.)
- FLORENCE L. SMITH, Associate Professor of English. A.B., Northwestern U iversity; M.A., University of Chicago; Instructor, State Normal School Oshkosh, Wisconsin. (Appointed July 1, 1917.)

D. SMITH, Associate Professor of Music. Mus. B., A.B., Oberlin College; M., Columbia University, 1928; formerly Head of Department of Music, State Teachers College, Winona, Minnesota. (Appointed September 1, 1922.)

AN PEEK SMOOR, Training Supervisor and Assistant Professor of Education. M.B. and A.M., Stanford University; Teacher in Public Schools; Assistant in History, Stanford University; Dean of Women, State Normal School, Cheney, Washington; Francis W. Parker School, San Diego, California. (Appointed September 1, 1923.)

J. STANTON, Commercial Law. LL.B., University of Michigan; graduate study, University of Michigan; editor legal journal, fourteen years; practicing attorney, Michigan and California; Instructor, San Diego High School and Junior College. (Appointed September 1, 1921.)

VENDER STOVALL, Assistant Professor of Engineering. Student University of Texas, 1895-1896, 1897-1898; B.S., in Electrical Engineering, University of California, 1924. Five years with the General Electric Company, research and design of apparatus; five years Chief Engineer of Mt. Whitney Power and Electric Company; three years on Irrigation Engineering; four years Efficiency Engineer in the oil fields of California. (Appointed September 1, 1924.)

IA SUHL, Geography. A.B., M.A., University of California; Teaching Fellow and graduate student two years, University of California; teacher in public schools two years. (Appointed September 1, 1926.)

RAND TANNER, Associate Professor of Physical Education. B.S., Columbia University; Graduate Boston Normal School of Gymnastics; Bachelor's Teaching Diploma, Teachers College, Columbia University; tutor, Brookline, Massachusetts; graduate student, University of California, 1925; Supervisor of Physical Education, San Diego County Rural Schools, 1921-1923. (Appointed July, 1904.)

CLIN D. WALKER,* Assistant Professor of English. University of Arizona. Holder of Arizona Rhodes Scholarship to Oxford, 1920-1923. B.A., (Hons. hon.), University of Oxford. Graduate Student, University of California. Instructor in Dramatics, Francis W. Parker School, San Diego, California, 1924-1926. (Appointed September 1, 1926.)

WRIGHT, Assistant Professor of Commerce. B.S., University of California; graduate study, one year, University of California; Head Department of Commerce, Union High School, Visalia, California, 1917-1921. (Appointed September 1, 1921.)

SPECIAL LECTURERS

AM H. BARROW, Public Health. A.B. and M.D., Harvard University. Formerly Professor of Physical Education and Associate Clinical Professor of Medicine, Stanford University.

N BRYSON, A.M., Director of San Diego Museum. Journalist. Editor of publications of International Red Cross. Part-time Professor of Anthropology, State Teachers College of San Diego.

ANTINE PANNUNZIO, Ph.D., Sometime Fellow in Social Research, New York University; Fellow in Social Economics at the Brookings Graduate School, Washington, D. C.; part-time Professor of Sociology, State Teachers College of San Diego.

ALD POLAND, A.M., Director of San Diego Fine Arts Gallery.

MORRIS, A.B., Assistant Director San Diego Fine Arts Gallery.

ASELTINE, Vocational Guidance. A.B. and M.A., Stanford University. Principal of San Diego High School.

INSTRUCTORS

R. ADAMS, English. A.B., M.A. University of Michigan. Instructor in Rhetoric, University of Michigan, 1920-1925; Associate in English, University of Washington, 1925-1928. (Appointed September, 1928.)

leave of absence, 1928-1929.

- HAROLD G. BRUCKER, Physical Education for Men. Coach of baseball and fresh football. Student at University of Redlands; basket ball coach, U. S. N Training Station; basket ball coach, Y. M. C. A., San Diego. (Appointed September 1, 1927.)
- HELEN LOIS DALE, Biology. A.B. and M. A., Stanford University. Teacher assistant in Biology, Reed College, 1923-1924; instructor in Zoology, Reed College, 1924-1926; graduate student and assistant in Biology, Stanford University, 1926-1928; acting instructor in Biology, Stanford University, September 1, 1928. (Appointed September 1, 1928.)
- F. W. DESILVA, Industrial Arts. California Institute of Technology; University of California at Los Angeles; B.A., San Diego State Teachers College. (Appointed September 1, 1927.)
- WALTER KAULFERS, Methods of Teaching Modern Languages. A.B., San Diego State College; M.A., Stanford University; Instructor in Spanish, Los Angeles High School.
- MAJORIE KELLY, Fine Arts. A.B., University of California at Los Angeles. Painted in Paris, of Andre Lhote, Painter, and of Mme. Alexandra Exter, Russian Designer. Instructor in Fine Art, Pasadena Junior High School. (Appointed September 1, 1927.)
- THOMAS F. McMULLEN, Coach of Basketball. Student and coach of fresh football, Oregon State College; instructor at Francis Parker School.
- CLARENCE GLADDEN OSBORN, History. A.B. and M.A., Stanford University. Instructor in Problems of Citizenship, Stanford University, 1927-1928.
- ELSIE B. PARKER, Speech Correction. Specialist in Division of Special Education, California Department of Education.
- DUDLEY H. ROBINSON, Chemistry. B.Sc. in Sugar Engineering, University of Louisiana; Audubon Sugar School, 1927; Chemist University of Louisiana Sugar House, 1925; Chemist, Raceland Sugar Factory, 1926; Chemist, Louisiana Sugar House, Louisiana, 1927; Research Chemist, Thornley and Company, 1927-1928; Chief Chemist, Pacific Marine Chemicals, Inc., 1928. (Appointed September 1, 1928.)

Medical Examiners

- FRANCES ALLEN, M.D., Medical Examiner and Adviser of Women.
- DEWEY H. WALDEN, M.D., Medical Examiner and Adviser of Men.

CALENDAR 1929-1930

er Sessions, 1929.

erm I, six weeks, June 24-August 2.

erm II, four weeks, August 4-26.

semester, 1929-1930.

September 4, 8.00 a.m., College Aptitude Test.*
 September 4, 1.30 p.m., Assembly of New Students.
 September 5, 8.00 a.m., Examination in Subject A (English Composition).
 September 5, 10.30 a.m., Assembly of New Students.
 September 5, 1.30 p.m., Fundamentals Test.†
 September 5, 7.30 p.m., Reception to Freshmen.
 September 6, 8.30 a.m., to 4.00 p.m., Registration of Old Students.
 September 7, 8.30 a.m., to 4.00 p.m., Registration of New Students.
 September 10, Class Work Begins.
 November 11, Legal Holiday.
 November 28, 29, Thanksgiving Recess.
 December 14, Christmas Recess Begins.
 January 2, 1930, Class Work Resumes.
 January 23, 1930, Mid-Year Examinations Begin.

Semester, 1930.

January 30, 8.00 a.m., College Aptitude Test.*
 January 30, 1.30 p.m., Assembly of New Students.
 January 31, 8.00 a.m., Examination in Subject A (English Composition).
 January 31, 10.30 a.m., Fundamentals Test.†
 January 31, 7.30 p.m., Reception to Freshmen.
 January 31, 8.30 a.m., to 4.00 p.m., Registration of Old Students.
 February 1, 8.30 a.m., to 4.00 p.m., Registration of New Students.
 February 3, Class Work Begins.
 April 12-20—Spring Recess.
 May 1, Dedication Day.
 May 30, Legal Holiday.
 June 5-12, Final Examinations.
 June 13, Annual Commencement Exercises.

er Sessions, 1930.

erm I, six weeks, June 23-August 1.

erm II, four weeks, August 5-26.

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897, and received its first class in autumn of 1898. In April, 1921, the school, together with all of the California schools, received by act of the legislature, later approved by the Governor of the state and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, the courses of the lower division (freshman and sophomore years) have been added, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for teaching service in the new three- and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the degree of Bachelor of Science (major in Education) were established for this institution June 30, 1923.

Since July 1, 1927, the courses formerly carried as "junior college" courses have been offered as lower division courses of the regular three- and four-year curricula. In July 12, 1928, the college was authorized, by the State Board of Education, to offer presecondary curricula with majors in Chemistry, History, English and

Mathematics required of all students, not as a prerequisite for entrance but for purposes of placement. Former graduates of this college and graduates from approved four-year colleges whose courses are exempt. A physical examination, a speech test and a social studies test are also required. The first two are given individually and students are given special appointments for them. The social relations test is given after the work has well started at an announced date. The social studies test is a prerequisite for the following courses in Education: I, CXXVIII, CIV, and CXVI. Former graduates of this college and graduates from approved four-year college courses and holders of California teaching credentials are exempt.

Romanic Languages, and special secondary certification curricula with major Physical Education and Fine Arts, all of them leading to the A.B. degree.

For the certification of teachers, the authorized course (elementary, special elementary, special secondary and junior high school) are offered, and require approximately, three years and four years of work done in residence.

THE CALENDAR AND REGISTRATION

The college year is divided into the autumn and spring semesters of eight weeks each, followed by a summer quarter consisting of a first term of six weeks and a second term of four weeks. Students may enter at the beginning of either semester and at the beginning of either summer term.

The Summer Session meets the needs of regular students who wish to earn credits toward the professional diploma or the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work for the Junior Certificate.

Registration of students will be made September 6 and 7. A duly certified transcript of the applicant's record must be in the possession of the Registrar before the day of the applicant's registration.

N. B.—For details, see "Requirements for Admission."

DEPARTMENTS OF INSTRUCTION

Teacher Training

The College offers courses for the training of teachers in both the primary and upper divisions of the elementary school and in the Junior High School with special recommendation in English, Social Science, Natural Science, Mathematics, Fine Arts, Industrial Arts, Music, and Physical Education. The degree B.A. is granted to students completing the four-year courses in elementary and junior high school education, and also in the liberal arts (presecondary) courses noted above.

Special degree certification courses of secondary grade are offered in Art and Physical Education.

Students who wish to enter for special certificate courses should not fail to meet the matriculation requirements.

Liberal Arts

In the Liberal Arts division courses are offered in the following: Anthropology, Economics, Engineering, English, Foreign Language, Geography, Graphic Art, History and Political Science, Hygiene, Mathematics, Music, Botany, Physics, Chemistry and Zoology.

Descriptions of the courses in both the professional and the collegiate divisions, with complete information as to admission requirements, will be found on the pages following under the headings "Admission," "Curricula," etc.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students will be required to meet the health standards set by the department of physical education, and all lower division students, unless exempt for cause, will be required to take the courses in physical education prescribed for freshmen and sophomores. Furthermore, each student will be expected as a member of efficient student and community life to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. Final ratings of the student are made by his instructors, so that he may at all times know how he stands; but the ability of the student to manage his own educational life and to come reasonably near to his best capabilities are factors that will control his final ratings.

Standards of character, as developed by and measured by honest student life and as revealed by evidences of the possession of thoroughgoing self-respect, community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, and every student has full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.

For the assistance of students and student organizations, adviserships have been established as follows:

THE STUDENT ADVISERS

Concerning matters of student-body policy, leaves of absence (men), personal advice (men), use of buildings, etc.—The Dean of Men.

Concerning appointments to teaching positions.—The Appointment Secretary.
Concerning the housing and living arrangements of students, rules of college student social affairs, personal advice (women), rules of attendance, etc.—The Dean of Women.

concerning supervision of practice teaching, conference, etc.—The Dean of Education.
 concerning matriculation program of studies and teaching, credits, etc.—The Registrar and the Board of Student Advisors.
 concerning health and physical condition, school athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).
 concerning relations to the training school, to pupils, routine, etc.—The superintendent of training.
 concerning student-body affairs.—The executive officers of the student-body; The Dean of Liberal Arts; The Dean of Women.

STUDENT LIFE AND ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but well coordinated through the central student body organization, The Associated Students. The following list indicates the major activities:
 Alpha Delta Pi (National Education Honor), Delta Kappa (Chemistry), Engineering Club, Geography Club, Spanish Club, Art Club, International Relations Club, Two Masque Players, Treble Clef Club, Men's Glee Club, College Orchestra.
 Men: Men's Club, Epsilon Eta, Eta Omega Delta, Phi Lambda Xi, Sigma Lambda, Kappa Phi Sigma, Omega Xi, Tau Delta Chi, College "Y" Club, The Y Club.
 Women: Associated Women Students, Women's Athletic Association, College Y. C. A., Shen Yo, Sphinx, Fra Di Noi, Komo Klub, Gamma Phi Zeta, Phi Gamma Gamma, Phi Sigma Nu, Sigma Pi Theta, Tau Zeta Rho, S. A. B. E. Club.
 Men's Athletics: Football, Baseball, basket ball, track, swimming and tennis.
 Women's Athletics: Tennis, basket ball, fencing, rowing and swimming.
 Publications: The Aztec (weekly), Del Sudoeste (year book), and El Palenque (monthly).

APPOINTMENT SERVICE

The department of recommendations has charge of the placement of graduates, assisting them in securing teaching positions and assisting superintendents and members of school trustees in finding qualified teachers.
 Recommendations are based on records which indicate every item in the candidate's equipment and particular care is taken to select for nomination in each case the teacher who can meet the requirements of the position.

FEES AND COURSE CHARGES

Registration Subject A	\$0 25
Elementals test	50
Large Aptitude test (Thorndike)	5 00
For additional transcript	1 00
Final examination fee	2 00
Library deposit (\$1.00 refundable)	2 00

EACH SEMESTER

Payable at Time of Registration

Registration fee	\$1 50
Registration time (less than six units) registration fee	5 00
Registration registration fee (penalty)	2 00
Library bus	1 00
Library el service (men and women)	1 50
Library er (Physical Education or Art), each key	50
Library 12A, 61A, 94A, 152A	1 00
Library ological Sciences	2 00
Library istry 1A-1B, 6AA, 6A-6B, 8-9	7 50
Library istry 101-102	2 50
Library istry 123-124 (per hour)	2 50
Library istry deposit (each course)	5 00
Library ation CVIII	3 00
Library raphy 1, 1A, 2, 2A, 116D, 117, 121, 124, 141	1 50
Library raphy 3 (Meteorology)	3 00
Library raphy 113 (Climatology)	3 00
Library ory 8A-8B	1 25
Library ory 4A-4B, 5A-5B, 111A-111B, 151A-151B, 173A-173B	2 50
Library strial Arts 1A, 1B, 61B	2 00
Library strial Arts 4	3 00
Library strial Arts 8A, 8B	4 00
Library ralogy 1A-1B, 2	3 00
Library ralogy deposit	2 00
Library ic 2A-2B, 3A-3B	1 00

Physics (each course, except 2A-2B)	\$
Physics deposit	
Speech Arts 55A, 55B, 55C, 55D	
Speech Arts 151	
Surveying	
Surveying deposit	

The English Department reserves the right to collect a library deposit fee to exceed two dollars, for a course which does not require the purchase of a text-book.

ORGANIZATIONS FEES

(Each Semester)

Associated Students	\$
Freshman, Sophomore, Junior, Senior Class	
Associated Women Students	
Associated Men Students	

EXPENSES

The Dean of Women will furnish, upon request, addresses of homes in which board and room may be secured, also lists of apartment houses and single rooms which may be patronized by students. Occasionally students are placed in positions where they may earn board, room, or small monetary compensation, but because of the irregularity of the demand it is not advisable to enter college entirely dependent upon such an opportunity.

Board and room, two meals per day, may be procured at from \$40 to \$45 per month. Apartments consisting of one room, kitchenette and bath, renting at from \$35 per month, will accommodate one or two persons. Single rooms with kitchen privileges at from \$10 to \$20 per month are also available. All those listed are in the vicinity of the College.

Other expenses for one semester of eighteen weeks may be estimated from the statement of Fees and Expenses, and Course Charges.

SELF HELP AND LOAN FUND

Opportunities for part-time employment for students not residents of San Diego are frequent, particularly in the case of young women who are able to assist their mother's helpers in housework or in the care of children. A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. An employment service for men is conducted by the Dean of Liberal Arts. The professional fund is administered for students in the teacher training courses, seniors eligible for assistance. The general loan fund is available for short time loans to worthy young men and women who have been in attendance at the college for more years. The Kiwanis Club of San Diego and the City Teachers' Association have set aside funds for student loans.

BUILDINGS AND EQUIPMENT

The main college building houses the library, the auditorium, the gymnasium, offices, laboratories and classrooms. The training school is housed in three separate units.

The building for Applied Arts was made ready for occupancy in September, 1922, as a result of the remodeling of the old Training School Building. A new building for physical education of men was finished January 1, 1923, and quarters for the physical education of women at the same date.

The institution has facilities and equipment as follows:

A college library of 32,000 volumes.

Laboratories for Physics, Chemistry, and Biological Science.

Shops, studios, and laboratories for the courses in Fine and Industrial Arts.

For Physical Education, a well equipped gymnasium, lockers and showers, changing rooms, and athletic field, tennis courts, etc.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than the physical ones must be taken into account in choosing a college. In cultural standards in art, music, literature and science, San Diego is an eligible college city because while it is not a large city yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-1916, including the buildings themselves, which in their consistent and effective carrying out of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections, and the director of the San Diego Museum is a member of the faculty of the College. The Art Gallery contains excellent exhibitions of paintings, and there are plans for the development of a Public Conservatory of Music for which the great out-of-door amphitheater furnishes a beginning. Balboa Park, in which all of these facilities are housed, also contains a modern horticultural farm and a great stadium for games, athletic gatherings and pageants.

La Jolla, within the city limits, the Scripps Biological Institute, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point, particularly as the city will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The professional, teacher-training courses profit because of the policy of cooperation generously followed by the City School Department, which has resulted in a great amount of laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary schools, junior high schools, and senior high schools, furnishes unusual opportunity for observation and demonstration to students in training, and for cooperation with the specialists of the city school system and the College.

Each of what is best in modern thought and influences is brought to the student through its weekly assembly, the programs for which, as arranged by a committee of students and faculty, include almost every worth while type of topic for appeal.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration, attendance, conduct of examinations, etc., college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system"; but there is a standard as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student affairs are dealt with as they arise (if they are not already the subject of custom, student-body by-laws) and, usually, are settled by student action.

The problem, in the process of solution, is that of student relations to the courses. At present, the studies are prescribed in arrangements of curricula and courses, with certain elections by the individual student, and these prescriptions are, of course, necessary. However, an effort is being made to give the student a certain voice in, and responsibility for study arrangements, through a joint committee of students and faculty members.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills and mountains all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round, and the College Amphitheater makes possible the presentation of many student productions in drama and pageant.

REQUIREMENTS FOR ADMISSION

Cashman Standing.

Every person admitted as a student to this college must be of good moral character, of good health, at least 16 years of age, and of that class of persons, who, at any age, would be admitted to the public schools of the state without restriction. Those who wish to enter a teacher training course must be free from any physical defect which would impair their fitness for the teaching service.

Graduates of accredited public high schools of California, graduates of other public schools of California, and graduates of schools of secondary grade of other states recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study, and who are recommended by the principal of the school in which such course of study was completed, may be admitted to undergraduate standing.

Candidates may be admitted by either of two methods:

1. Clear admission. High school graduates who present twelve recommended units and principals' certificates of recommendation, will be granted clear admission. Graduates of three-year senior high schools must present nine recommended units earned in grades ten, eleven, twelve.

2. Provisional admission. High school graduates who present fewer than the prescribed number of recommended units, but who through their principals' estimations and recommendations, present satisfactory evidence of ability to profit from courses in teacher training, who have abilities, interests and talents desirable for teaching, and who pass suitable college aptitude tests, may be admitted as provisional students. At the close of the first semester in residence, a comprehensive reevaluation of the credentials and records of all such students will be made. Students will then be granted clear admission, dropped from the college, or, for sufficient reason continued as provisional students.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can not meet the requirements of either of the above methods. The entrance examinations of the Board are given in June each year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made on a blank form to be obtained from the secretary of the Board upon request.

II. Advanced Standing.

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects which matriculation credit was given.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcript, of record from other institutions will not be returned; copies of them made.

III. Special Students.

A candidate not less than 21 years of age who has not had the opportunity to complete a satisfactory high school course but who is considered competent to undertake certain courses may be admitted to special standing. Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Such students become candidates for graduation upon satisfying the regular entrance requirements.

GENERAL REGULATIONS

Examinations

All students entering the college are required to take the following tests, for purposes of guidance and assistance: (a) College Aptitude Test. (b) Entrance Composition Test. (c) Social Relations Test. (d) Speech Test. Exceptions may be made for students who register for 6 units of work or less, for former graduates of this college, and for graduates of approved four-year colleges.

The Fundamentals Test in reading, spelling, arithmetic, etc., is a prerequisite for certain courses in Education (see descriptions of courses in Education). Exception may be made for former graduates of this college and for graduates of approved four-year colleges.

A physical examination is required of all students at entrance.

Registration

All students are required to register on one of the regular registration days preceding the opening of the class work of each semester. Any student who registers after the close of the first week of the semester is subject to limitation of his study list. A late registration fee of two dollars must be paid for registration after the close of the regular registration period. Changes in study lists may be made only with the approval of the proper study-lists officer.

Matriculation

A student is matriculated when he has satisfied all entrance requirements and has demonstrated his ability to do satisfactory college work. The standing of all students is therefore provisional during the first semester of residence.

Classification

Regular students are those students who have complied with the requirements of graduation and are registered in 12 or more units of work.
Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.
Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation permit them to pursue. Special students may also be limited students.
For convenience in administration students who have completed 28 to 63 units of work are classified as sophomores; those who have completed 64 to 91 units are classified as juniors; and those who have completed 92 or more units are seniors.

Units of Work and Study-Lists Limits

One unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, one hour with two hours of preparation; or three hours of field or laboratory work. Fourteen units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal student's program for all students except those in Engineering, where the normal requirement is $17\frac{1}{2}$ or $18\frac{1}{2}$ units. An entering freshman, however, is allowed to register for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points; or 18 units will be credited provided the student attained an average of not less than 1.5 grade points. Any course in which a student received a passing grade may be counted toward the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student under 21 years of age will be allowed to register for more than 12 units without the permission of the Registrar.

SPECIAL SUBJECT REQUIREMENTS

English Composition

An entrance test in English (Subject A or an equivalent) is given and the results must be considered by students and advisers in the making of schedules. Students are themselves primarily responsible in the matter of overcoming deficiencies. No student whose use of the English language continues to be notably deficient or inadequate should expect to receive a certificate of graduation from the college.

Physical Education and Hygiene

All regular students upon admission to the College must report to the proper health examiner for enrollment in physical education classes. A student may be excused from exercises in physical education on account of illness or physical disability only by petition to the health examiner.

Scholarship Grades and Grade Points

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus 2 points per unit.

The grade E is used to record work which is of low order but which may be passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D, otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. As in the case of an E the work must be completed during the next semester or the grade automatically becomes an F.

To qualify for a certificate in any curriculum or for a transcript of scholarship standing in transferring to another collegiate institution, a student must have earned a minimum grade points as he has earned units of credit; that is, he must have attained an average of at least C grade in all work undertaken at the College.

Conditions and Failures

Grade credit is not given for courses in which the student has been given a grade of F (conditioned) except upon the removal of the deficiency by supplementary examinations or study. A report of "incomplete" is made only in case the student,

for good reasons, has been absent from class meetings or examinations or failed to perform a definite part of the work of the course. A condition "incomplete" not removed before the end of the following semester is considered failure. In case of failure in a course no credit is given until the course has been repeated.

Probation and Disqualification

A scholarship record below an average of grade D per unit of work and in any single semester disqualifies a student for further attendance at the College.

Any student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the College to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the number of units carried per semester.

Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the College. Probationary status may be continued until the cumulative grade points deficit is reduced, in the case of a regular student to an amount less than 12 and, in the case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one semester on reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

Eligibility for Extra-Curricular Activities

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any semester is ineligible in the next succeeding semester to represent the College in connection with any athletic, literary, musical, dramatic, social, or other organization.

Special Examinations and Reexaminations

Entrance examinations and examinations taken for the purpose of removing matriculation deficiencies or making up a course left "incomplete" are regarded as special examinations. Reexaminations are permitted only for the purpose of removing deficiencies incurred in college courses and can not be taken for the purpose of improving the grade mark recorded on the student's permanent record.

A fee of two dollars, payable in advance, is charged for every special examination and reexamination.

Withdrawals From Class

A student may not withdraw from class without the permission of the study-lists officer. An unauthorized withdrawal from a class will result in a notation of failure on the student's record. A withdrawal after the sixth week of a semester except for reasons beyond the student's control is interpreted as a withdrawal in the course.

Leave of Absence

A student should apply to his instructor for a leave of absence or an excuse having been absent from a class exercise. A leave of absence for one or more days should be obtained from the proper dean. An excuse for absence does not relieve the student from completing all the work of each course to the satisfaction of the instructor.

Fellowships

Fellowships (without honorarium) have been instituted, a fellowship to be conferred by vote of the faculty on nomination of the department concerned, to entitle the recipient to special training and to recommendation to county or state boards of education for the special elementary or the special junior high school certificate.

Candidates must be graduates of California, or equivalent, Teachers College and must submit satisfactory evidence of special fitness and attainment, or must be able to show two years of college or other equivalent training and special fitness.

Holders of fellowships who have done one year of satisfactory work will be entitled to recommendation for the special elementary and junior high school certificate; provided, that within the period specified, they are able to meet the requirements of the State Board of Education for special certification.

DEGREE REQUIREMENTS

General Requirements for the Degree of Bachelor of Arts in the Teachers College and the Liberal Arts College

The electives must be so chosen that, with the required work, the student will have a total of 6 units of credit in English, 12 units in Social Science and 12 units in Natural Science. Courses in journalism or in speech arts are not acceptable.

ing the English requirements. The electives in Natural Science may be 1 to a minimum of 6 units if the student presents acceptable grades from the school in Natural Science in laboratory courses offered in the third or fourth year. In general, each year's work of high school science will thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work, simply an exemption of the requirements will be permitted. Courses in the freshman and sophomore years are called Lower Division work. Courses in the junior and senior years are called Upper Division. The former require course numbers below 100 or C, and the latter are given numbers 100 or above.

At least 40 of the units completed during the junior and senior years shall be Upper Division courses. Introductory courses open to first-semester freshmen taken in the junior or senior year may involve either additional work or reduction in the number of units of credit. Students who have less than 60 units of college credit are not ordinarily permitted to take upper division courses. If such students should take upper division courses only lower division credit will be given.

A course in the U. S. Constitution (Pol. Sci. 101), or the substitute course in Political Science 1B or U. S. History 171B, is required of all candidates for the degree.

A minimum of 124 units of college work is required. Not less than 54 of these must be earned in the junior and senior years. All candidates for the A.B. degree must complete at least 30 units of work at this college. Twenty-four of these residence units must be taken with the rank of senior, at least twelve of which are taken in the fall or spring semester. The purpose of these provisions is to preclude the possibility of graduation from the college with the A.B. degree on the basis of residence work which was done prior to the senior year or upon exclusively summer session record at this college when only a limited sphere of collegiate work and activity is in operation.

The number of grade points acquired in this College by the candidate for a degree must be equal to the number of units registered on his permanent record (See page 17 for an explanation of scholarship grades and grade points.) Credits from other colleges will be evaluated in accordance with this general

Teaching Credentials

Students who are planning to teach and to secure California teaching credentials at graduation from this college are urged to follow the patterns of the teacher education curricula. It is highly inadvisable to start on a liberal arts course with the intention of changing later to a course leading to a teacher's credential. A minimum of 24 units in education (maximum of 40) is required for any teaching credential secured through graduation from this college. Students should note the Course of Instruction statement and prerequisites for Practice Teaching Education CXVI, also for courses I, CXXVIII, CIV, CVIII.

Academic Teaching Majors and Minors

Students who wish to secure California teaching credentials through graduation from this college must so pattern their courses that they will include what is known as an "academic teaching major." This consists of 24 units in a field other than education, 12 of which must be in the upper division. An academic teaching credential is also required. This consists of 12 units in a field other than education, 6 of which must be in the upper division. Candidates for the degree in the elementary course may substitute two minors for the major and minor required for completion of the junior high school course. Academic teaching majors and minors may be established in the following fields: English, Fine Arts, Foreign Languages, Mathematics, Music, Natural Sciences, Physical Education, and Social Sciences (Anthropology, Economics, Geography, History, Political Science, Sociology).

An "academic teaching major" should not be confused with an "academic major." The former term alludes to what is considered the minimum college work in an academic field which is required as a preparation for teaching subjects in the field in high school. An "academic major" refers to the minimum college work in an academic field which is required for post-graduate research work in that field. The academic major usually includes about 24 units of upper division work. An academic teaching major in this college is 24 units, 12 of which must be upper division. Similarly, an "academic teaching minor" differs from an "academic minor." By a wise selection of electives a student may usually complete an academic major in the field of his choice instead of meeting the less exacting requirements of an academic teaching major. This will enable the student to pursue post-graduate work in the field of his academic major, if desired, without being compelled to do additional undergraduate work in that field.

TEACHERS COLLEGE CURRICULA

These courses lead to the A.B. degree and also to the General Elementary Credential (permitting the holder to teach in grades I-VIII), or to the Junior High School Credential (permitting the holder to teach in grades VII a junior high school), or to both credentials.

Freshman Year

First Semester—

General Biology, Biology 10A (unless taken in High School) -----
 Social Ethics -----
 Geography Elements (Natural Science), Geog. 1A -----
 Physical Education 1A or 52A -----
 Art Structure,¹ Fine Arts 6A -----

Second Semester—

General Biology, Biol. 10B (unless taken in High School) -----
 Geography Regions (Social Science), Geog. 2A -----
 Physical Education 1B or 52B -----
 Art in the Elementary School,¹ Ed. XIX -----

Either Semester—

Introduction to Social Science -----
 Electives for Junior High Credential 18, for Elementary Credential or both -----

Total -----

Sophomore Year

First Semester—

General Psychology, Psychology 2A -----
 Music Fundamentals,¹ Music 1A -----
 Games (women), Phys. Ed. 52 or Phys. Ed. 1C (men) -----

Second Semester—

Genetic Psychology, Psychology 2C -----
 Music in the Elementary Schools,¹ Ed. XVII -----
 Administration,¹ Phys. Ed. 53 -----
 Physical Education 1D or 52D -----

Either Semester—

Introduction to Education,² Ed. I -----
 Industrial Arts 61A¹ or 61B¹ (both required) -----
 Electives for Junior High Credential 22, for Elementary Credential or both -----

Total -----

Junior Year

First Semester—

Primary Curriculum,¹ Ed. CXXVIII -----
 Mathematics in the Elementary School,¹ Ed. CXXIX -----
 Children's Literature,¹ Ed. CXXVI -----

Second Semester—

Practice Teaching,² Ed. CXVI -----

Either Semester—

Educational Measurements, Ed. CVIII -----
 Curriculum in Field of Academic Major³ or Elementary Curriculum,¹ Ed. CIV (or both) -----
 Health Education, Phys. Ed. 151 -----

Electives for Junior High Credential 20, for Elementary Credential 12, or both -----

Total -----

Senior Year

First Semester—

Practice Teaching,² Ed. CXVI ----- 6

Second Semester—

Principles of Elementary Education¹ or ----- 3
 Principles of Junior High School Education,³ Ed. CI ----- 3

Electives ----- 21

Total ----- 30

The Elementary Diploma Course

Lapses September 15, 1930

Freshman Year

	Units of Credit
h -----	6
ation -----	1
uctory Principles of Education, ² Ed. I -----	3
uction to Geography, Elements 1A and Regions 2A -----	4
matics in the Elementary School, ¹ Ed. CXXIX -----	2
al Education -----	1
ves ⁴ -----	15
Total -----	32

Sophomore Year

ology 2A and 2C -----	6
ry Curriculum, ^{1, 2} Ed. CXXVIII -----	2
en's Literature, ¹ Ed. CXXVI -----	2
in the Elementary School, ¹ Ed. XVII -----	2
the Elementary School, ¹ Ed. XIX -----	2
al Education, 52, 53, 52C or 52D -----	3
ves ⁴ -----	15
Total -----	32

Junior Year

ntary School Curriculum, ² Ed. CIV -----	3
tional Measurements, ² Ed. CVIII -----	3
ce Teaching, ² Ed. CXVI -----	10
l States Constitution (Pol. Sci. 101) -----	2
ves ⁴ -----	14
Total -----	32

CURRICULA FOR SPECIAL CERTIFICATION

Special credentials enabling the holder to teach in the special field designated in one to twelve, inclusive, will be granted upon graduation with the A.B. in the fields of Art and Physical Education. Twenty-four units of work in this field as a minimum and from twenty-four to fifty units in the special field are required.

Art Education

This course leads to the A.B. degree and to the General Junior High School Credential. It also leads to the Special Credential of the Fine Arts Type which enables the holder to teach art in the elementary school, junior high school and high school.

Lower Division

	Units
duction to Social Science -----	3
sh -----	6
ical Education -----	2
5A-6B -----	4
h Elementary School, Ed. XIX -----	2
ology 2A -----	3
uctory Principles of Education, Ed. I -----	3
trial Arts 61A-61B -----	4
ves* -----	37
	64

Not required if only a Junior High School Credential is sought.
Open only to students who have passed the Fundamentals Test.

Not required if only an Elementary School Credential is sought.
Taking all courses excepting Ed. CVI leads to the combined Elementary and Junior High School Credential, permitting the holder to teach in grades I-X. See statements of requirements in social sciences, natural sciences and academic teaching major.

In the case of an applicant for a degree the electives must be so chosen that the student will have a total of 12 units in Social Sciences and 12 units in Natural Sciences. The electives must include 6 units in Biology unless this subject was taken in high school. The electives in the Junior year must include a minimum of four units in upper division courses in liberal arts.

Students must so pattern their courses that they will include an "academic teaching major" and an "academic teaching minor" (see page 19). They must also meet the requirements for social sciences, natural sciences and English (see "Requirements," page 18). By exercising care in patterning the electives in this course it is possible for a student to complete this course and satisfy the requirements for an academic teaching major.

Upper Division

Practice Teaching (four units in special field) Ed. CXVI	-----
Elementary Curriculum, Ed. CIV	-----
Principles of Secondary Education, Ed. CXXI	-----
Art in the Junior High School, Ed. CXIX	-----
U. S. Constitution, Pol. Sci. 101	-----
Elective in Education	-----
Electives*	-----

Summary

Art major for the special credential	-----
Academic Teaching Major (not art or educational)	-----
Academic Teaching Minor (not art or education)	-----
Education	-----
Electives*	-----

PHYSICAL EDUCATION

This course leads to the A.B. degree and the General Junior High School Credential. It also leads to a Special Credential of Physical Education Type which entitles the holder to teach physical education in the elementary school, junior school and senior high school.

Freshman Year

First Semester—	Units
Introduction to Social Science	3
Social Ethics	0
English 4A or 52A or 60	3
Physical Education 1A (men); 52A (women)	$\frac{1}{2}$
Natural Science:	
Biology 10A (unless taken in High School); or Zoology 1A	3 or
Geography 1A	2
Hist., Pol. Sci., Econ., Math. or Foreign Language	3
Must pass a prescribed Red Cross Swimming Test in Freshman Year	$\frac{1}{2}$
	15 or

Second Semester—

English	3
Physical Education 1B (men); 52B (women)	$\frac{1}{2}$
Natural Science: Biology 10B or Zoology 1B	3 or
Social Science: Geography 2A	2
History, Pol. Sci., Econ., Math. or Foreign Language	3
Hygiene 1 (men); Hygiene 2 (women)	1 or
Academic teaching major or electives*	3 or
	15 $\frac{1}{2}$ or

Sophomore Year

First Semester—

Psychology 2A	3
Music 2A or Speech Arts 1A	2 or
Physical Education 52 (women); 1C (men)	$\frac{1}{2}$
Administration, Phys. Ed. 53 or 54 (men)	2
Physiology 100	4
Academic teaching major or electives*	4
Acceptable proficiency in tennis must be acquired in Sophomore Year. (Judged on playing skill and knowledge of teaching technique.)	$\frac{1}{2}$
	16 or

Second Semester—

Introductory Principles of Education, Ed. I	3
Anthropology	3
Psychology 2C	3
Physical Education 1D (men); 52D (women)	$\frac{1}{2}$
Academic teaching major or electives*	7

Junior Year		Units	
Semester—			
Educational Psychology, Ed. CXXX	-----	3	
Elementary School Curriculum, Ed. CIV	-----	3	
Applied Anatomy, Phys. Ed. 155	-----	2	
Stunts and Tumbling (women), Phys. Ed. CLVIII	-----	$\frac{1}{2}$	
U. S. Constitution, Pol. Sci. 101 or History 171B (unless Political Science 1B has been taken)	-----	2	or 3
Sports and Athletics	-----	$\frac{1}{2}$	
Academic teaching major or electives*	-----	5	or 4
		16	
2d Semester—			
Practice Teaching, Ed. CXVI	-----	3	
Educational Measurements, Ed. CVIII	-----	3	
Health Education, Phys. Ed. 151	-----	2	
Physical Education 101	-----	1	
Zoology 100 or Zoology 114A or Zoology 121	-----	3	
Organized Activities, Phys. Ed. CLX	-----	2	
Folk Dancing (women), Phys. Ed. CLXI	-----	2	
Self Testing Activities (men), Phys. Ed. CLXII	-----	1	
Gymnastic Stunts (men), Phys. Ed. CLXIII	-----	1	
Sports and Athletics	-----	$\frac{1}{2}$	
		16 $\frac{1}{2}$	

Senior Year		Units	
1st Semester—			
Physical Education Practice Teaching; 3 units. Also teaching in academic major if desired; 3 units. Ed. CXVI	-----	3	or 6
Secondary Education, Ed. CXXI	-----	2	
Sports Methods (women), Phys. Ed. CLVII	-----	2	
Teaching Methods (men), Phys. Ed. CLVI	-----	2	
Character Dancing, Clogging and Interpretative Dancing, Phys. Ed. CLXIV	-----	2	
Sports and Athletics	-----	$\frac{1}{2}$	
Academic teaching major or electives*	-----	7	or 4
		16 $\frac{1}{2}$	
2d Semester—			
Physical Education Practice Teaching, Ed. CXVI	-----	3	
Principles of Physical Education CLXXII	-----	2	
Physical Education Tests and Measurements CLXXIII	-----	2	
Teaching Methods (men), Phys. Ed. CLVI A-B	-----	2	
Sports Methods (women), Phys. Ed. CLVII A-B	-----	2	
Community Recreation (women), Phys. Ed. CLXX	-----	2	
Camp Craft (women), Phys. Ed. CLXXIV	-----	2	
Community Recreation (men), Phys. Ed. CLXXI	-----	2	
Technique of Officiating (men), Phys. Ed. CLXVI	-----	1	
Sports and Athletics	-----	$\frac{1}{2}$	
Academic teaching major or electives*	-----	3	
		16 $\frac{1}{2}$ or 15 $\frac{1}{2}$	

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND THE DEGREE IN THE LIBERAL ARTS CURRICULA

Letters and Science (Presecondary) Curriculum

This course leads to the A. B. degree. Completion of the requirements of curriculum also enables the graduate to satisfy the undergraduate requirements of the General Secondary Credential which, with post-graduate work, will enable holder to teach in a senior high school or junior college. The degree courses are limited to majors in English, Chemistry, History and Romanic Languages.

The junior certificate will be granted on the completion of 64 units of college work and the degree on the completion of 124 units. Certain requirements of junior certificate may be met by courses taken in the high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree.

Lower Division

Freshman Year

	Units Sem. I S
Social Ethics -----	1
Orientation -----	$\frac{1}{2}$
Physical Education -----	1 or 2
Hygiene -----	3
English ¹ -----	3-5
Foreign Language ² or electives -----	3
Social Science ³ -----	2-5
Natural Science ⁴ or electives ⁵ -----	16 $\frac{1}{2}$

Sophomore Year

Physical Education -----	$\frac{1}{2}$
Foreign Language ² -----	3
Additional year course ⁶ -----	3
Social Science ³ -----	3
Natural Science ⁴ or electives -----	3
Electives ⁵ -----	3
	15 $\frac{1}{2}$

¹ The English requirement may be satisfied either in the freshman year or in the sophomore year.

² At least 15 units in not more than two languages. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of college requirement.

³ To be chosen from the following: Anthropology 1A-1B, Commercial Geography 18A-18B, *Economics 1A-1B, Economic History 11, *Geography 1-2, *History 4A-4B, *5A-5B, *8A-8B, *Political Science 1A-1B, Psychology 2A, 2B, Sociology 50.

⁴ Twelve units required

A maximum of 6 units of the following high school laboratory courses may be counted to meet the natural science requirement when these courses are offered in the third or fourth year of the high school. Each year of the high school course will be counted in satisfaction of 3 units of the requirement: Physics,* Chemistry,* Biology, Physiology, Zoology.

A minimum of 6 units must be chosen from the following: Astronomy 10A-10B,* Botany 2A,* 2B,* 4, Chemistry 1A*-1B,* 6A*-6B,* 8-9,* Geography 1A, Physics 2A-2B, 3A-3B,* 1A-1B,* 1C-1D,* Zoology 1A,* 1B,* 100.*

⁵ Electives should be chosen to prepare for the requirements of the Major Department as given in the descriptive list of courses in this catalog.

⁶ In addition to the minimum requirement of 15 units in not more than two languages, of 6 units in English and of year courses in high school elementary algebra and plane geometry, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses.
Latin: Two years of high school courses in Latin.
English: 1A and 1B.
Mathematics: 1A and 1B or 3A and 3B or 3A and 6.

* At least one of the courses marked with an asterisk must be chosen to meet the social science requirement and the natural science requirement, respectively.

Upper Division

(See page 17 for additional requirements.)

courses prescribed in the lower division should be completed before the junior year. The removal of deficiencies in the junior year may prolong the college course the normal period of time.

The requirements of the Major Department must be completed in accordance with the following general rules:

A minimum of 24 units in the Major subject is required, at least 15 units of which must be in upper division courses completed in the junior and senior years. The Department shall recommend, in addition to the courses prescribed, such other courses as may be considered desirable and shall exercise advisory supervision over the student's program during his junior and senior years.

A student is advised to choose his Major Department as early in his college career as practicable so that he may be able to plan his work according to the requirements given in the descriptive list of courses under the head of the Major Department. Failure to meet the lower division requirements of the Department in the junior year may make it impossible to satisfy the upper division requirements within the normal period of two years.

A minimum of 12 units in a minor subject is required, at least 6 units of which shall be in upper division courses completed in the junior and senior years. Courses are available in the following subjects: Zoology, Chemistry, Economics, English, Fine Arts, Foreign Language, Geography, History, Industrial Arts, Mathematics, Music, Physical Education, Physics, Political Science, Psychology:

Three units in General Psychology must be included in the upper division program if not taken in the lower division.

A minimum of 12 units in Education is required and a maximum of 18 units may be counted toward the degree. The courses in Education must be chosen from the following list:

ED I, Introductory Principles (lower division elective); Ed. CI., Principles of Elementary Education; Ed. CII., Principles of Secondary Education; Ed. CIV., Principles of High School Education or Ed. CVI, Principles of Elementary Education; Ed. VII, History of Education; Ed. CVIII, Educational Measurements; Ed. CIX, Educational Administration and Supervision; Ed. CXXX, Educational Psychology; Ed. XL, Elementary Statistics; Psychology 2C, Genetic Psychology.

A total of not more than 12 units of the applied and vocational courses taken in the junior or more of the departments listed below will be counted toward the degree:

Agriculture: Home Floriculture 26; Nature Study 20.

Economics: Typewriting 1A-1B, 2A; Stenography 1A-1B, 2A; Office Methods 1B; Business Mathematics A.

Industrial Arts: Woodwork 1A-1B; Painting and Finishing 2; Wood Turning 1B; Cabinet Work 5; Upholstering 6; Concrete Work 7; Sheet Metal 9; Pipe Fitting 10; Automobile Mechanics 13; Elementary Industrial Arts 61A and 61B; Auto Mechanics 116; Advanced Cabinet Work 117.

English: Applied Journalism 53A-53B.

Music: Choral and instrumental organizations.

Physical Education: 53 or 54; 151.

For Women: 52A, 52B, 52C or 52, 52D.

For Men: 1A, 1B, 1C, 1D and all sport activities.

PRE-PROFESSIONAL CURRICULA

Pre-Legal Curriculum

In the lower division requirements of the Letters and Science curriculum or, in special cases, the Commerce curriculum should be met in full.

Electives recommended:

History 4A-4B, 6 units.

Economics 1A-1B, 6 units.

Political Science, 1A-1B, 6 units.

Public Speaking, 1A-1B, 6 units.

Sociology 50, 3 units.

Psychology 2A-2B, 6 units.

Accounting, 14A-14B, 8 units.

Business Law 18A-18B, 6 units.

English 52A-52B.

Third year:

Required: History 171A-171B and a minimum of 12 additional upper division units. A student who is pursuing a four-year Pre-Legal curriculum must major in a specific field in his junior and senior years.

Pre-Medical Curriculum

The lower division requirements of the Letters and Science curriculum shall be met in full.

Freshman Year

	Units Sem. I	
Social Ethics	1	
Orientation	1	
Physical Education	$\frac{1}{2}$	
Hygiene	1 or 2	
Foreign Language ¹ or electives	3-5	3
Chemistry 1A-1B	5	5
Social Science ²	3	3
Electives	0 or 3	3
	$16\frac{1}{2}$	16

Sophomore Year

Physical Education	$\frac{1}{2}$	
Foreign Language ¹ or Chemistry 6A-6B ³	3	3
English 1A-1B	3	3
Additional year-course ⁴	3	3
Zoology 1A-1B	4	4
Social Science ²	3	3
	$16\frac{1}{2}$	16

Junior Year

Chemistry 8-9	3	3
Physics 2A-2B and 3A-3B ⁵	4	4
Zoology 100	3	
Electives ⁶	6	8
	15	15

Pre-Dental Curricula

A five-year curriculum, the first year's work to be taken in the Letters and Science curriculum and the remainder in a college of dentistry.

	Units Sem. I	
Social Ethics	1	
Orientation	1	
Physical Education	$\frac{1}{2}$	
English	3	3
Foreign Language	3 or 5	3
Chemistry 1A-1B	5	5
Zoology 1A-1B or Biology 10A-10B	4 or 3	4
Mechanical Drawing		1
	$16\frac{1}{2}$ or $17\frac{1}{2}$	$16\frac{1}{2}$ or $17\frac{1}{2}$

¹ The foreign language requirement of 15 units in not more than two languages must include a reading knowledge of German or French (3 years of high school German or French or 10 units of college German or French). Each year of high school course in a foreign language may be applied to reduce the language requirement by 3 units without, however, reducing the number of units required for the Junior Certificate (64).

² Twelve units required: See Letters and Science curriculum.

³ Chemistry 6A-6B should be taken either in the sophomore or junior year to satisfy the admission requirements of certain medical schools.

⁴ Six additional units required. See Letters and Science curriculum.

⁵ This requirement should be met in the freshman or sophomore year if the language requirement has been met in the high school.

⁶ Chemistry 101-102 is recommended. A student who is pursuing a four-year Medical course must major in a special field and should choose the electives to satisfy the requirements of his Major Department.

ix-year curriculum, the first two years' work to be taken in the Letters and curriculum in conformity with the requirements for the Junior Certificate remainder in a college of dentistry.

Freshman Year		Units Sem. I	Units Sem. II
Ethics	-----	1	---
Physical Education	-----	$1\frac{1}{2}$	$\frac{1}{2}$
Science ¹	-----	1 or 2	---
History 1A-1B	-----	5	5
or 1A-1B ² or Physics 2A-2B ²	-----	4 or 3	4 or 3
Foreign Language ³ or electives	-----	3-5	3-5
Science ⁴	-----	3	3
		$16\frac{1}{2}$ or $17\frac{1}{2}$	$16\frac{1}{2}$ or $17\frac{1}{2}$
Sophomore Year			
Physical Education	-----	$\frac{1}{2}$	$\frac{1}{2}$
History 1A-1B	-----	3	3
History 8-9	-----	3	3
Foreign Language ³ or Zoology 100 ²	-----	3	---
Foreign Language ³ or Elective	-----	---	3
Final year-course ⁵	-----	3	3
Science ⁴	-----	3	3
		$15\frac{1}{2}$	$15\frac{1}{2}$

Physical Education should be taken the second semester if a five-unit language course is taken in the first semester.

A student who has not earned credit for at least two years of a high school course in a foreign language will find it necessary to elect Physics 2A-2B instead of Zoology 1A-1B and 100 to satisfy the Junior Certificate requirements by the end of the sophomore year.

At least 15 units in not more than two languages. A high school course may be taken toward the satisfaction of the foreign language requirement, each year of the high school reducing the requirement by 3 units without, however, reducing the number of units required for the Junior Certificate (64).

Twelve units required. See Letters and Science curriculum.

Additional units required. See Letters and Science curriculum.

SOCIAL SERVICE CURRICULUM

The lower division requirements of the Letters and Science curriculum should be met in full.

Additional requirements:

Economics 1A-1B, 6 units.

Biology 10A-10B, 6 units; or Zoology 1A, 4 units.

Anthropology 1A-1B, 4 units.

Social Economics 50, 3 units.

Political Science 1A-1B, 6 units.

History 4A-4B, or 5A-5B, or 8A-8B, 6 units.

Psychology 2A, 3 units.

Third year: Recommended electives.

Social Economics 150, Science of Society, 3 units.

Social Economics 155, Social Research, 3 units.

Economics 101, History of Economic Thought, 3 units.

Economics 140, Elementary Statistics, 3 units.

Zoology 114A, Genetics, 2 units.

Education CVIII, Educational Measurements, 3 units.

Physical Education CLXX or CLXXI, Community Recreation, 2 units.

Physical Education 155, Applied Anatomy, 2 units.

History 171A-171B, Rise of American Nation, 6 units.

Political Science 113, American Political Ideals, 3 units.

COMMERCE CURRICULUM

Freshman Year

	Units Sem. I	Units Sem. II
Ethics	-----	1
Physical Education	-----	$\frac{1}{2}$
Science	-----	1 or 2
History 1A-1B ¹ or Speech Arts 1A-1B ¹	-----	3
Foreign Language ²	-----	5
History 4A-4B ¹ , 8A-8B ¹ or Political Science 1A-1B ¹	-----	3
Physical Science ³ or electives	-----	2 or 3
	$16\frac{1}{2}$	$16\frac{1}{2}$

Sophomore Year		Units Sem. I
Physical Education		1 $\frac{1}{2}$
Geography 1 and 2 ¹		3
Natural Science ² or electives		3
Mathematics 2		3
Economics 11 or elective		3
Economics 1A-1B		3
Economics 14A-14B		3
		15 $\frac{1}{2}$
Junior Year		
Psychology 2A ⁴		3
Economics 18A-18B ⁴		3
Economics 140		3
Additional upper division Economics		3
Electives		3
		15

MECHANICAL, ELECTRICAL, CIVIL AND MINING ENGINEERING CURRICULA

First Year		Units Sem. I
Mathematics 3A-3B	✓	3
Physics 1A-1B	✓	3
Chemistry 1A-1B		5
Civil Engineering 1A-1B		3
Orientation		1
Hygiene		1
Social Ethics		—
Physical Education		1 $\frac{1}{2}$
Elective		—
		16 $\frac{1}{2}$
Second Year		
Mechanical and Electrical Engineering		
Mathematics 4A-4B		3
Physics 1C-1D		3
Descriptive Geometry 3D		3
Machine Drawing and Design 6A		1
Applied Mechanics 11		3
Electrical Engineering 12		—
Pattern Making 8A-8B		2
Physical Education		1 $\frac{1}{2}$
English		3
		18 $\frac{1}{2}$
Civil Engineering		
Civil Engineering 3 (summer session)		(
Mathematics 4A-4B		3
Physics 1C-1D		3
Descriptive Geometry 3D		3
Geology 1A		—
English		3
Physical Education		1 $\frac{1}{2}$
Railroad and Irrigation:		
Applied Mechanics 11		3
Electives		3
		18 $\frac{1}{2}$
Sanitary and Municipal:		
Chemistry 8-9		3
Chemistry 6A-6B		3
		18 $\frac{1}{2}$

¹ May be taken either in the freshman or sophomore year.

² Two or three years of a high school course in a foreign language may be toward the satisfaction of the language requirement in part or in whole, each reducing the requirement by 3 units without, however, reducing the number of required for the Junior Certificate (64).

³ Twelve units required for the Junior Certificate. See natural science requirement in the Letters and Science curriculum.

⁴ May be taken either in the sophomore or junior year.

Mining, Economic Geology and Petroleum Engineering

Second Year

	Units Sem. I	Units Sem. II
Engineering (summer session) -----	(3)	
Mathematics 4A-4B -----	3	3
Physics 1A-1B -----	3	3
Geology 1A -----		3
Geology 9 -----		3
Descriptive Geometry 3D -----	3	--
Applied Mechanics 11 -----	3	--
Chemical Engineering 12 -----	--	3
Civil Education -----	$\frac{1}{2}$	$\frac{1}{2}$
English -----	3	--
Physical Science -----	3	3
	<u>18$\frac{1}{2}$</u>	<u>18$\frac{1}{2}$</u>
Economic Geology Major:		
Chemistry 6A-6B -----	3	3
	<u>18$\frac{1}{2}$</u>	<u>18$\frac{1}{2}$</u>
Petroleum Engineering Major:		
Organic Chemistry 8-9 -----	3	3
	<u>18$\frac{1}{2}$</u>	<u>18$\frac{1}{2}$</u>

CURRICULUM IN INDUSTRIAL AND ENGINEERING CHEMISTRY

First Year

	Units Sem. I	Units Sem. II
Mathematics 3A-3B -----	3	3
Physics 1A-1B -----	3	3
Chemistry 1A-1B -----	5	5
Organic Chemistry A-B -----	5	5
Biological Science -----	1	--
Chemistry 1 -----	--	1
Civil Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Physical Science -----	--	--
Physical Ethics -----	--	--
	<u>17$\frac{1}{2}$</u>	<u>17$\frac{1}{2}$</u>

Second Year

Mathematics 4A-4B -----	3	3
Physics 1C-1D -----	3	3
Chemistry 6A-6B -----	3	3
Chemistry 8-9 -----	3	3
English -----	3	3
History or Political Science or Economics -----	3	3
Civil Education -----	$\frac{1}{2}$	$\frac{1}{2}$
	<u>18$\frac{1}{2}$</u>	<u>18$\frac{1}{2}$</u>

PRE-AGRICULTURAL CURRICULUM

First Year

	Units Sem. I	Units Sem. II
Physical Ethics -----		--
Biological Science -----	1	--
Chemistry 1 -----	--	1
Civil Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Mathematics 2A-2B -----	4	4
Chemistry 1A-1B -----	5	5
Physics 2A-2B -----	3	3
English -----	3	3
	<u>16$\frac{1}{2}$</u>	<u>16$\frac{1}{2}$</u>

Second Year

Civil Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Chemistry 6A-6B -----	3	3
Chemistry 8-9 -----	3	3
Geology 1A-1B -----	4	4
Economics 1A-1B -----	3	3
Surveying 1A-1B -----	3	3
	<u>16$\frac{1}{2}$</u>	<u>16$\frac{1}{2}$</u>

CURRICULA IN ACCOUNTANCY AND SECRETARIAL TRAINING

The aim in giving courses in Accountancy and in Secretarial Training is offer a business preparation of college grade. The courses are open to high school graduates who majored in commercial subjects as well as to those who have had training for business. Candidates of not less than twenty-one years of age who have not completed four years of high school work may also be admitted as special students. The curricula have been formulated with a recognition of the varied needs of those who plan to engage actively in commercial pursuits. To this end, courses of one and of two years in length are provided in Accountancy and Secretarial Training, or in a combination thereof. A minimum of 64 units of credit is required for a certificate.

It is the intention in the different courses to encourage individual research work in order that the student may become more resourceful, self-reliant, and keener to analyze and cope with business conditions and problems. To furnish material for this work, the city of San Diego will be used as a laboratory, through the cooperation of merchants, manufacturers, transportation men and financiers.

Accountancy

Two-Year Course (leading to Certificate in Accountancy).

	Units Sem. I	Units Sem. II
Accounting 14A-14B	4	
Typewriting 1A-1B	4	
Business Mathematics A		
Orientation	1	
Hygiene		
Physical Education	$\frac{1}{2}$	
Social Ethics		
English Composition	3	
Electives	3	
	15 $\frac{1}{2}$	1
Second Year		
Advanced Accounting 60A-60B	3	
Commercial Law 18A-18B	3	
Economics 1A-1B	3	
Psychology 2A-2B or Electives	3	
Office Methods 3A		
Physical Education	$\frac{1}{2}$	
Economic History 11 or Electives	3	
	15 $\frac{1}{2}$	1

Secretarial Training

Two-Year Course (leading to Secretarial Certificate).

	Units Sem. I	Units Sem. II
Shorthand 5A-5B	5	
Typewriting 1A-1B	4	
Hygiene 2	2	
Physical Education	$\frac{1}{2}$	
Social Ethics		
Orientation	1	
English Composition	3	
Electives		
	15 $\frac{1}{2}$	1
Second Year		
Commercial Law 18A-18B	3	
Office Methods 3A		
Economics 1A-1B	3	
Accounting 14A-14B	4	
Psychology 2A-2B or Electives	3	
Physical Education	$\frac{1}{2}$	
Economic History 11 or Electives	3	
Business Mathematics A		
	16 $\frac{1}{2}$	1

Accountancy and Secretarial Training

First Year

	Units Sem. I	Units Sem. II
Accounting 14A-14B -----	4	3
English Composition -----	3	3
Typewriting 1A-1B -----	4	4
Business Mathematics A -----	—	—
Orientation -----	1	—
Hygiene -----	—	1
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Social Ethics -----	—	—
Electives -----	3	5
	<u>15$\frac{1}{2}$</u>	<u>16$\frac{1}{2}$</u>

Second Year

Advanced Accounting 160A-160B -----	3	3
Commercial Law 18A-18B -----	3	3
Office Methods 3A -----	—	3
Economics 1A-1B -----	3	3
Shorthand 5A-5B -----	5	5
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$
Electives -----	2	—
	<u>16$\frac{1}{2}$</u>	<u>17$\frac{1}{2}$</u>

COURSES OF INSTRUCTION

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 v

Courses numbered from 1 to 99 and I to XCIX are freshman or sophomore (lower division) courses; those numbered from 100 to 199 and C to CXCI are junior or senior (upper division) courses, available for sophomores only by arrangement.

AGRICULTURE

26. Home Floriculture

A study of ornamental gardening to familiarize students with material used in gardening and methods of propagation. A part of the work consists in lath practice and visits to nurseries, green houses and florists. The course is especially designed to furnish a part of the equipment needed by those intending to pursue nature study and general science.

An elective for teachers college students, not classified as a natural science. Two units; either semester.

20. Nature Study

The course aims to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter is partly drawn from the physical sciences, astronomy, physics, etc. (for the various grades), and partly from life studies of the plant and animal world (for the various grades).

An elective for teachers college students, classified as a natural science. Two units; either semester.

ANTHROPOLOGY

Preparation for the Major in Anthropology (lower division)—Anthropology

Anthropology 50. Man's Evolutionary History

Prehistoric evidences of man. Classification of races. Primitive society. Prerequisite: Sophomore standing.

Three units; first semester.

ASTRONOMY

Preparation for the Major in Astronomy (lower division)—Astronomy 1. Trigonometry, Mathematics 3A-3B, 5A-5B, Physics 2A-2B and 3A-3B or 1C-1D, a reading knowledge of French or German.

1. Descriptive Astronomy

This cultural course is planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are made. Especial attention is given to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with a six-inch Alvin Clarke telescope is used for observation. Also a good selection of lantern slides is used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry.

Three units; either semester.

11. Modern Astronomy

Stars and nebulae. A study of modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisite: Astronomy 1 and a knowledge of physics.

Two units; one semester.

BIOLOGICAL SCIENCES

(Botany, Zoology, Biology, Physiology)

General students who wish to take only one or two courses in this department should register for Biology 10A-10B, 10C, or 114A (see below for prerequisites for each course).

Preparation for Major or Minor: Students who expect to make Botany or Zoology their major or minor subject should not take Biology 10A-10B or 10C. They should register for courses that are prerequisites for upper division courses in the biological department. Recommended courses in other departments are high school Chemistry 1A, 1B, 8, and 9, French, German, physics, geography 1, geology, and anthropology.

The usual requirement for the Major: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses

subject (botany or zoology) or eighteen in the major subject and six in the minor subject. The college now offers to the student who wishes to major in zoology more than two years of work toward a major and offers two years of work to botany majors. (Courses to be added later.)

Students preparing to teach science in the junior high school should include in their courses work in zoology, botany, physics, chemistry (at least high school level), and Education CXX. The following are also desirable: geography, geology, anthropology, astronomy, and upper division biological sciences.

Fees: A fee of \$2 is required in all laboratory courses in this department. The department covers the cost of materials used. For breakage and extra material in addition to the estimated need, an extra charge must be made.

Lower Division Courses

BIOLOGY

10B. General Biology

M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in heredity. Laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic principles of biology. It is designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and three-hour laboratory period per week. Designed for those who do not expect to specialize in Zoology or Botany, but not open for credit to students who have taken a biological science in the high school nor to those who have taken Biology 10C, Zoology 1A, or Botany 2A. Students who have taken 10A-10B may elect Zoology 10B or Botany 2A for credit.

Three units; both semesters.

General Biology

M. E. JOHNSON, DALE

Prerequisite: A high school course in Physiology, Biology, Botany, or Zoology. An outline of the main facts and principles of biology and their bearing upon human life. Lectures, demonstrations, and conferences. Designed for students who do not expect to specialize in botany or zoology. Not open for credit to students who have taken Biology 10A-10B, Zoology 1A, or Botany 2B, but students who have taken 10C may elect Zoology 1A or Botany 2A for credit. Two lectures and conference hour per week.

Three units; either semester.

BOTANY

General Botany

HARVEY

A study of the fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.

Four units; first semester.

General Botany

HARVEY

A continuation of 2A treating morphology and relationships of the lower plants including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Four units; second semester.

California Plants

HARVEY

Lectures, laboratory exercises and field work on the classification and ecology of plants of the San Diego region. Two lectures and one three-hour laboratory period per week.

Three units; second semester.

ZOOLOGY

General Zoology

HARWOOD

An introduction to animal biology dealing with structure, functions and evolution of animal life. The laboratory work supplements the lectures and is based on the study and observation of living and preserved material. The course will maintain one with the fundamental facts and theories of biology as they pertain to animal life. It is valuable to the general student as well as to the biology specialist. Two lectures or recitations and two three-hour laboratory periods per week.

Four units; first semester.

General Zoology

HARWOOD

A continuation of 1A. The structure, relationships, and classification of the phyla. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A.

Four units; second semester.

Upper Division Courses

BOTANY

102. Plant Geography

HAR

Lectures and field work on the principles of geographical distribution of plants.
Prerequisite: Botany 2A-2B, or Botany 4, or equivalent.

Two units; first semester.

ZOOLOGY

100. Embryology

M. E. JOHNS

The development of vertebrates as illustrated by the frog, chick, and pig.
Hours of laboratory and one hour of lecture per week. Prerequisite: Zoology 1B or Biology 10B.

Three units; second semester.

112. Invertebrate Zoology

M. E. JOHNS

The structure, classification, habits, and life histories of the invertebrates of the region, particularly of the marine fauna. One hour of lecture and six hours of laboratory per week. Prerequisite: Biology 10A-10B or Zoology 1A.

Three units; first semester. (Not offered in 1929-30.)

114A. Genetics

D.

A study of the laws of inheritance in plants and animals. Two lectures per week.
Two units; second semester.

114B. Evolution

D.

A study of the development of theories of evolution.
Two units, two lectures per week; first semester.

121. Entomology

HARW

The classification, life-history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and three hours of laboratory per week.

Three units; second semester.

113A. Taxonomy and Natural History of the Vertebrates.

HARW

One hour of lecture and six hours of laboratory per week. Frequent field work and the identification of preserved material. Prerequisites: Zoology 1B or Biology 10B.

Three units; first semester.

113B. Ornithology

D.

The structure and identification of birds, especially those of the Pacific Coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1A-1B, Biology 10A-10B, or 10C.

Three units; second semester.

PHYSIOLOGY

100. Physiology of Exercise

D.

A study of the mechanism of the human body, with special reference to the physiology of the motor system. Lectures, demonstration experiments, discussions, and reports. Prerequisite: Zoology 1B or Biology 10B.

Two units; first semester. (Not offered in 1929-30.)

Teacher-Training Courses

For courses in the teaching of science in junior high schools see Education C2.

CHEMISTRY

Preparation for the Major (lower division)—Chemistry 1A-1B, with a grade of C or better. Chemistry 6A-6B, Physics 2A-2B or 1A-1B, Mathematics C and 3A-3B or their equivalent, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

The Major (upper division)—All units in excess of fourteen are counted as upper division units when taken in the junior or senior year. The minimum requirement for the major must include Chemistry 8-9, 101-102 and 123-124. The organization of the course for the major student must follow a definite plan approved by the department.

Lower Division Courses

B. General Chemistry

PIERCE

The general principles, laws of chemical combination and a description of the elements and their important compounds. Two lectures, one quiz and two laboratory periods per week. The second semester laboratory is Qualitative Analysis through Gravimetry. Prerequisites: High School Chemistry or High School Physics and Trigonometry. Five units; both semesters.

C. Qualitative Analysis

PIERCE

A study of qualitative separations and theories as applied not only to solutions but to ores, slags, alloys, and solid salts. One hour lecture and quiz, three laboratory periods. Prerequisite: Chemistry 1A-1B. Four units; first semester.

D. Introductory Quantitative Analysis

PIERCE

The work consists of determinations by gravimetric, volumetric and electrochemical analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B. Three units; both semesters.

E. Organic Chemistry

GILKEY

A study of the carbon compounds (aliphatic and aromatic) and their derivatives, including the synthesis of different compounds and the proof of their constitution. A general consideration of the subject and the principles involved. Two lectures or quiz and one laboratory period, first semester; one lecture or quiz and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B. Three units; both semesters.

Upper Division Courses

F. 102. Advanced Inorganic Chemistry

PIERCE

The course treats of the laws and theories of elementary work from the viewpoint of physical chemistry. The laboratory work covers such typical items as gas laws, mol weights, laws of combination, ionization, equilibria (homogeneous, heterogeneous and complex) and electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: 1A-1B, 6A-6B, 8-9. Four units; both semesters.

G. Industrial Chemistry

ROBINSON

A course of lectures on the application of chemistry to the arts. The most important industries are embraced and principles of evaporation, distillation, substitution, filtration, crystallization, calcination, refrigeration, use of fuels and other purification are discussed. Prerequisites: 6B-9. Three units; second semester.

H. 124. Organic Preparations

PIERCE

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. A reading knowledge of German is desirable. Laboratory conferences. Prerequisite: 8-9. Hours to be arranged. Two to five units; both semesters.

I. History of Chemistry

PIERCE

Development from time of Geber on reading, report and seminar basis. Considers the experimental advances and production of the experimenters by the Ostwalds, W. B. Smith, Emil Fischer and Victor Meyer. Prerequisites: 101-102. Two units; second semester.

Teacher-Training Course

For course in the teaching of Chemistry see Education CXX-C.

ECONOMICS

Preparation for the Major in Economics (lower division): Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 2A-2B; Geography 1 and 2. Recommended: Sociology 50, Accounting 4-14B. Commercial Law 18A-18B.

Lower Division Courses

J. 1B. Principles of Economics

A. G. PETERSON

A careful consideration is given to the basic principles of economics: Utility, wealth, value, price; economic production, distribution, and consumption; rent,

interest, wages, and profit; competition, monopoly, and large scale production; idleness, economic waste, and luxury; money and banking, international trade tariffs; transportation corporations, labor problems, socialism, taxation, etc. The aim of the course is (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursue a broad foundation in economic principles; and (3) to introduce the future citizen to the political and economic problems of our time. Lectures, discussions, quiet and collateral reading. Not open to entering freshmen except by special arrangement.

Three units; both semesters.

11. Economic History of the United States

WR

A comprehensive survey of American economic development and of national legislation in the field of industry.

Three units; second semester.

14A-14B. Accounting

WR

A knowledge of bookkeeping is not required nor is it of advantage. A student made of the balance sheet; profit and loss statement; various types of bookkeeping; original entry; the opening, conducting and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions and consolidations; branch store accounting, etc., keeping in view the best modern accounting practice. Four hours lecture and laboratory.

Three or four units; both semesters.

18A-18B. Commercial Law

STAT

The object of the course in commercial law is to give clearly and concisely leading and fundamental principles of business law. Simple cases showing actual application of the principles to commercial and business transactions are given, rather than development of those principles. The subjects covered are contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance and wills, with a brief study of evidence.

Three units; both semesters.

Upper Division Courses

100. Economic Theory

Advanced study of demand and supply, production and distribution, and economic welfare. Prerequisite: Economics 1A-1B.

Three units; one semester.

101. History of Economic Thought

The chief contributors to economic theory from the time of Adam Smith to the present day. Prerequisite: Economics 1A-1B.

Three units; one semester.

121. Business Organization

Description and analysis of business corporations, associations, and other forms of combination; differentiation of functions, methods of operation, etc. Prerequisite: Economics 1A-1B.

Three units; one semester.

125. Advertising and Salesmanship

Principles and problems.

Three units; one semester.

131. Public Finance

Principles and practice of taxation, public expenditures, and financial administration.

Three units; one semester.

134. Investments

Investment analysis and a study of the investment of personal savings.

Two units; one semester.

135. Money and Banking

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A-1B.

Three units; one semester.

Statistical Methods

An introductory study of the statistical measures and devices most commonly in connection with work in the field of economics. Opportunity will be given in practice in the use of calculating machines and other aids to computation. Prerequisite: Two years of high school algebra. 3 units; both semesters.

Economic Geography

(See Geography.)

160B. Advanced Accounting

WRIGHT, EVERTS

The second year consists of an intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; cost accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and types of businesses. Six hours lecture and laboratory. 3 units; both semesters.

Social Economics

Lower Division Courses

Social Ethics

COLDWELL

Required of all entering students. This course aims to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society—both to society. One hour per week for 9 weeks.

Home Making

COLDWELL

A general view of the place of the home in society, administration of the household, budgeting of incomes to cover shelter, food, clothing, savings and social life. Field work, assigned reference reading and theme writing required. Lectures, discussions, recitations. 2 units; either semester.

Introduction to Social Science

BRYSON, SMOOR

A study of man's descent, race, social organization, ideals of conduct, and civilization. Modern problems. 2 units; either semester.

General Sociology.

KELLY

The nature and organization of human group activity is studied. This includes a study of the cultural heritage and its relation to public opinion and social change. Previous preparation in Biology and Psychology is recommended. 3 units; either semester.

Upper Division Courses

Social Psychology.

(See Psychology.)

Science of Society

PANUNZIO

An advanced study of social environment, basic sociological concepts and principles, social institutions and organizations, social origins, social progress, social control and social values. Open to students who have taken Economics 150B or Sociology 50 and to other properly qualified juniors and seniors by special arrangement. Texts, directed reading, lectures, reports on research. 3 units; first semester.

Social Research

PANUNZIO

A course in the theory and practice of social science research, open by permission of the instructor to such juniors and seniors who in Social Economics 150B have shown capacity to undertake research and an interest in some specific field. Each student will select a social or economic topic for investigation, will conduct research, make frequent reports of progress and have opportunity to cooperate with the Sociological Laboratory of Neighborhood House. The course is intended for prospective social workers, for future teachers interested in the socialized school and for those expecting to enter the social science field. The group will meet once a week for reports and discussion of principles and the practice of research and social science. 3 units; second semester.

Secretarial Training

1A-1B. Typewriting

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material. Special reference to commercial forms, tabulation and billing; specifications, forms and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit is given for this course except in the curricula in accountancy and secretarial training. Ten hours lecture and laboratory practice.

Four units; both semesters.

2A. Typewriting

A short course designed for those who do not wish to enter the business but desire a knowledge of the use of the typewriter. Five hours laboratory practice. Ordinarily no credit is given for this course.

Two units; first semester.

5A-5B. Stenography

An intensive course designed for the practical preparation of office secretaries. A thorough study is made of the Gregg System and the ability to read and shorthand rapidly and correctly, both literary and commercial, is developed. Shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit is given for this course except in the curricula in accountancy and secretarial training.

Five units; both semesters.

6A. Stenography

Development of speed in writing and transcription. Advance dictation on forms, legal forms, speeches and literary material.

Three units; second semester.

3A. Office Methods and Appliances.

Practice and principles of office management, including organization, arrangement and operation. Study and use of modern office appliances, such as the typewriter, mimeograph, filing devices, calculating and bookkeeping machines. Training made to local establishments to study at first hand actual business conditions. Prerequisite: Typewriting 1A or its equivalent.

Three units; second semester.

A. Business Mathematics

A practical course in the mathematics of business. The ability to add, subtract and divide rapidly and accurately is developed. A thorough study is also made of interest, compound interest, discount, amortization tables, insurance rates. Credit is given only in the curricula in Accountancy and Secretarial Training.

No credit; first semester.

EDUCATION

1. Education—Introductory Principles and Technique

This is the first required course in the study of education and has as its purpose the orienting of the mind of the student toward education and teaching. A preliminary survey of the field is made and of the theories and general principles applying to education in a modern democratic society. It also functions as a guide in vocational guidance in that it seeks to acquaint the student with the qualities needed for success in teaching and helps him to appraise his own possibilities.

In the survey of this field of public education a study is also made of the public and quasi public organizations which more or less directly participate in the progress of education. Especial note is made of the Parent-Teacher Association and its functions.

Open only to students who have passed the Fundamentals Test.

Three units; either semester.

Upper Division Courses

CI. Principles of Junior High School Education

HARDY

This course deals with the principles of educational science that should underlie the organization, administration and curriculum of the secondary school, especially in the junior high school field. The prevailing patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to the articulation of the secondary school with the lower and higher schools.

This course also functions as a "Comprehensive Examination" of applicants for the college degree and diploma which automatically become teaching credentials in California. Seminars are organized for reviewing and integrating the contributions to educational theory and practice from the fields of biology,

10A-10B), Psychology (2A-2C), Sociology (10A), principles and technique of teaching (I), primary school curriculum (CXXVIII) (for those who also seek general elementary credential), educational measurements (CVIII), and practical teaching (CXVI). Students who take this course are exempted from course fee units; one semester.

Education for Citizenship NIDA
analysis of the ideals and habits essential for good citizenship followed by study of the part which each school subject and activity contributes to their development.
Two units; either semester.

Public Education in California HARDY
study of the structure, organization and administration of the California school system, as given in the school law of the state, and as interpreted by the decisions of the State Superintendent of Public Instruction, the Attorney General and the California courts. It is intended to give to prospective teachers a conception of the historical development and the main features of the California school system.
Two units; either semester.

Elementary School Curriculum BROOM, BELL
study of the materials and activities of the elementary school and of accepted principles in teaching. A summary and evaluation is made of the results of scientific investigations in this field. Special emphasis is placed on the teaching of arithmetic. Open only to students who have passed the Fundamentals Test.
Three units; either semester.

Intelligence Testing BELL
brief review of the history and rationale of intelligence testing is followed by discussion of the Stanford revision of the Binet-Simon Test, with demonstration of practice. The best group tests of intelligence are discussed and demonstrated. Emphasis is given in giving, scoring and interpreting results is required. The purpose of the course is to give teachers information on the subject, to enable each student to decide if by inclination and endowment he is fitted to do scientific testing and to learn in the way of becoming skilled in giving and interpreting intelligence tests.
Two or three units; one semester.

Principles of Elementary Education JOHNSON
This course is designed as a culmination of the studies of education and its psychology. It is a study of the biological, psychological and social principles underlying modern education, in connection with the demands of modern society in a complex social, economic and scientific world, with a view to the formulation of a sound philosophy for the educative process.
As a course (CI, Principles of Junior High School Education, this course also functions as a "Comprehensive Examination" of applicants for the Teachers College degree with the same arrangements for seminar reviews and tests. Students who take this course must be applicants for the general elementary credential only or those who are applicants for the junior high school credential or both the junior high school and elementary credentials will take course CI instead of this course.
Three units; one semester.

History of Education AULT, KOTTER
The course includes a brief study of early Hebrew, Greek, Roman and early American Education, of the changes brought about by the Renaissance, of the transition to modern secular education, and includes brief reviews of the educational philosophies of the great reformers, together with a concluding study of the development of the American school system and of American ideals and practices in education.
Three units; one semester.

Educational Measurements BROOM
This course consists of a brief survey of the history of scientific measurement in the elementary field, and a study of the nature of intelligence tests, especially of the practical uses of group intelligence tests. The greatest stress, however, is laid upon the practical uses of achievement tests. The Stanford Achievement Tests given to entire training school and to many college students furnish a great part of the material used. Simple statistical training in handling data is acquired through practical problems. Open only to students who have passed the Fundamentals Test.
Three units; either semester.

CIX. Educational Administration and Supervision

JOH

A survey of the systems of organization, classification and promotion of personnel and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc.

Two units; one semester.

CX. Educational Organization and Supervision

JOH

A study of types of supervision and methods of evaluating and improving teaching.

Two units; one semester.

CXVI. Practice Teaching

AULT AND SUPERV

Systematic observation, participation and actual teaching under competent supervision in the Training School and in the city schools of San Diego. A general plan for a student who has not had teaching experience is to take a period of practice teaching daily for a semester and two periods daily for an additional semester. In some cases the second assignment is for a half day. Only in case of an emergency will a student who has not had experience in teaching be permitted to satisfy all practice teaching requirements in a single semester. It is planned to distribute the practice teaching assignments so that the student will have experience in both upper and lower grades, with the emphasis on the grade or grades in which the student is particularly interested. Deviation from this plan is liable to result in unsatisfactory training and is tolerated only when unavoidable.

One period of teaching daily for a semester is usually credited with two to three units and two periods with four to six units, depending upon the character of the assignment and the work. When more time is needed the student is assigned to additional practice. The practice teaching requirements are usually reduced for those who have had successful teaching experience. The usual requirement for inexperienced teachers is nine units.

Open only to those who have a C average in all college work and a passing grade in the Fundamentals Test.

CXVIII. Class Management

Co

A discussion of the problems arising in connection with schoolroom discipline, methods of securing a wholesome school "spirit" and the application of civic principles to school life.

Two units; one semester.

CXXI. Principles of Secondary Education

E

This course deals with the principles of educational science that should underlie the organization, administration and curriculum of the secondary school. The prevailing patterns of high school education are studied, and tendencies in the direction of future development are indicated. Particular attention is given to the problem of individual differences and to that of articulation of the secondary school with the lower and higher schools.

Two units; one semester.

CXXVIII. Primary School Curriculum

HAM

A study of the activities of the first three grades of the elementary school. Special emphasis is placed upon beginning reading and frequent demonstration lessons are conducted.

Open only to students who have passed the Fundamentals Test.

Three units; either semester.

CXXX. Educational Psychology

F

This is a study of the learning process and includes such topics as laws of types of learning, curves of learning and of forgetting, economy of learning, rate and limits of improvement, spread of improvement or transfer and experimental studies in learning. Prerequisite: Psychology 2A and 2C.

CXL. Elementary Statistics

F

An introductory study of the statistical measures and devices most commonly used in connection with educational work. Data will be taken from typical conditions. Opportunity will be given to obtain practice in the use of calculating machines and other aids to computation.

Three units; one semester.

THE STATUTORY CURRICULUM

(Elementary School)

NOTE.—The courses listed under this head do not include reviews of elementary school subject matter. They are professional courses, and presuppose a reasonable mastery of the materials of the elementary school curriculum and of the general curriculum of the secondary school.

Lower Division Courses

Music in the Elementary School

D. SMITH

Study of objectives of music teaching in the public elementary schools. Study of vocal voice. Organization of song material by grades. Procedure in presenting songs, ear training, elementary notation, sight singing, and part singing. Conclusions. Prerequisite: Music 1A, Music Fundamentals. Two units; either semester.

Art in the Elementary School

BENTON

Prerequisite: Art 6A or its equivalent. This course is a practical application of elements and principles of Art to problems for grades 1-6. It is presented through lectures, reports, demonstration lessons and laboratory work. Two units; either semester.

Geography Materials for the Elementary School

CLARK

This course aims to familiarize students with geography texts, geographical atlases and other supplementary books, magazines valuable in the work, the different types of wall and desk maps, and also with concrete geographical materials such as globes and exhibits. Prerequisite: Geography 1 or 1A. Two units; second semester.

Upper Division Courses

1. Children's Literature

CORBETT

Study of the principles of selection underlying the choice of literature for the elementary school, with special emphasis on the social and educational status of the child. A study of source material and its classification. A critical examination and evaluation of new literary materials for children's use and a discussion of the illustrators of books for children. Practice in developing technique in story telling through practical work in Story Hours. Two units; both semesters.

X. Mathematics

RICHARDS

Discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics, together with study and evaluation of the newer methods as used under ordinary classroom conditions. Two units; either semester.

COURSES FOR SECONDARY SCHOOL TEACHERS

Upper Division Courses

Organization and Administration (see Education CIX and CX)

English

BAGLEY

This course consists of the following items: (a) Lectures and required papers on the objectives of secondary school work in English and on these selection and preparation of materials; (b) of the study of methods with respect to pupils and activities; (c) of observation of the work in the city schools. Two units; one semester.

Mathematics

RICHARDS

This subject matter, management of it and methods of teaching it in a junior high school curriculum in general mathematics, make up the principal topics of this course. Specific problems discovered include the application of arithmetic in current life and business life, intuitive geometry, graphic representation and the phase of mathematics suitable to the junior high school pupil, together with the problem of making mathematics useful in preparation for senior high school mathematics. Two units; one semester.

1. Geography

CLARK

This course deals, first with the subject matter suitable for secondary schools, especially the junior high school, and with the arrangement and interpretation of subject matter; second with the problems of teaching geography in the junior high school grade. Lectures, papers, readings and observations are included. Two units; one semester.

2. Social Science

This course for prospective junior high school teachers attempts to meet the needs of the teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography and civics. Methods of securing direct experience and training

through suitable school and other survey and study projects, and of developing genuine and continuing interest in social and civic problems through observation and reading, will be discussed and illustrated.

Two units; one semester.

CXV. History

A study of subject matter, organization, materials and methods for the teaching of history in the junior high school. The course includes a study of textbooks, pictures and other material.

Two units; one semester.

CXVII. Commercial Education in the Secondary School

The place of commercial education in the general field of vocational education. The objectives of commercial education. A study of methods, use of texts, cooperation with business men.

Two units; first semester.

CXIX. Art in the Junior High School

Prerequisite: XIX. This course is for third year Art students working for the Special Art Certificate of Elementary and Junior High School grade. 2 units.

CXX. A-B-C. The Teaching of Science in the Junior High School

Courses in the content, methods, field work, textbooks, laboratory work, equipment, and reference reading for Junior High School Science. Prerequisite: 18 units of college science.

CXX-A. Biology

Prerequisite: Eighteen units of college science including Biology 10A-10B, Zoology 1A-1B and Botany 2A-2B.

Two units; first semester.

CXX-B. Physical Sciences

Prerequisite: Eighteen units of college science including Physics 2A-2B, equivalent and high school or college chemistry.

Two units; second semester.

CXX-C. Chemistry

Laboratory planning, fitting, optional fields of development beyond the matter are covered. Relative methods of presentation and a consideration of various texts and manuals are considered. Prerequisites: Chemistry 101-102.

Two units; second semester.

CXXII. Organization of Industrial Arts

Prerequisite: Thirty units in Industrial Arts. Two hours per week.

Two units; second semester.

CXXIII. Teaching Industrial Arts

Prerequisite: Thirty units in Industrial Arts. Five hours per week.

Three units; either semester.

CXXIV. Romance Languages

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish. The different methods; their history and value.

Two units; one semester.

CXXVII. Music in the Secondary School

Two units. (Not offered in 1929-30.)

ENGINEERING

C. Mechanical Drawing

This course is designed to train students in lettering and in neatness and accuracy in the use of instruments. Geometric problems, shop problems, theoretical objects with developments, warped surfaces with developments and penetrations of two prisms, pyramid and prism, cylinder and prism, cone and cylinder, and other similar problems are studied. Mechanical Drawing C is substantially equivalent to the high school course in Mechanical Drawing.

Three units; either semester.

3D. Descriptive Geometry

In this course 21 or more plates are required and four examinations given. The plates deal with the customary problems of points, lines, planes, perpendiculars

ls, distances, angles, solids, developments, warped surfaces, intersections, etc. m of the course is to create originality, and to develop the ability of the to visualize and present on paper problems which are theoretical or prac- Prerequisite: Mechanical Drawing C or the high school course in Mechanical ng.
ree units; either semester.

Engineering Drawing

McINTYRE

fting room practice supplemented by occasional lectures designed to meet the of engineering students. Lettering; orthographic projection; preparation of g drawings for engineering plants; flow sheets; graphical methods of repre- engineering data. Prerequisite: Mechanical Drawing C or equivalent.
o units; second semester: Or one unit; both semesters.

Machine Drawing and Design

STOVALL

ction of machines; motion, force, and work in machines; analysis of ism; velocity, acceleration, and effort diagrams; parallel motions, cams; s; toothed wheels; valve gear and design. Three lectures and two drafting s. Prerequisite: Descriptive Geometry 3D.
e units; second semester.

Civil Engineering (Plane Surveying)

McINTYRE

e and adjustment of surveying instruments, computations and map-making, er with a study of land, topographic, city and mine surveying. Two instruc- periods and one three-hour period for field work and mapping each week. Pre- s: Trigonometry and Mechanical Drawing.
ree units; both semesters.

Surveying (Summer Class in Surveying)

McINTYRE

tical field problems in reconnaissance, triangulation, location and topographic s. Observations for meridian, time and latitude. Precise work in linear and r measurements. Development of self-reliance, accuracy and professional skill part of the student. Four weeks course commencing after the close of the semester. Prerequisite: Civil Engineering 1A-1B.
ree units.

Mineralogy

McINTYRE

laboratory practice in the identification of the commoner minerals: Course 1A ng practice in determination of minerals by their physical properties and 1B e use of the blowpipe and chemical reagents. Prerequisite: High School stry.
o units; each semester.

Mineralogy

McINTYRE

ystallography and crystallography laboratory. Lectures on the underlying f crystal formation, with laboratory practice in determination of crystal forms methods of crystal projections. Two lectures and one laboratory period each Prerequisites: High School Chemistry and Geometry.
ree units; second semester.

Applied Mechanics

STOVALL

blems concerning the action of external forces on rigid bodies; composition esolution of forces; equilibrium; rectilinear and curvilinear motion; accelera- linear and angular; harmonic motion; translation and rotation; moment of u; kinetic and potential energy; work, power, friction; machines; efficiency. s: Mathematics 3A-3B and Physics 1A-1B.

Elements of Electrical Engineering

STOVALL

general survey of the field of Electrical Engineering. Single and polyphase s; power-factor, reactance, generators, motors, transformers, and transmission ver. Prerequisites: Mathematics 3A-3B and Physics 1C.
ree units; second semester.

ENGLISH

eparation for the Major (lower division)—English 1A-1B and six units from 6B, 52A-52B. Recommended: A reading knowledge of German or French. e Major in English—Required: Thirty-six units in English, of which not than six may be in Journalism and Public Speaking and not more than nine composition. At least fifteen units in upper division courses must be completed : junior and senior years.

Lower Division Courses

1A-1B. English Composition

ADAMS, BAGLEY, F. L.

The purpose of this course is to develop precision and directness in speaking and writing. A study of models, chosen from modern literature, forms the basis of discussion and presentation. In 1A the emphasis is on exposition; in 1B on argumentation, description, and narration. Open only to students who have passed English A examination.

Three units; both semesters.

4A-4B. Great Books

A survey of books and bodies of literature that are significant sources or inspirations of European and American culture. These include the Hebrew Bible, Epic and Tragedy, Norse Eddas, and other literature of religious and cultural character; and highly significant masterpieces in poetry and prose by great authors down to the nineteenth century.

Three units; both semesters.

52A-52B. Types of Literature

Introduction of the study of lyrical and narrative poetry; origin and development of poetry; typical poems.

Three units; first semester.

Introduction to the study of dramatic poetry and prose, the essay, novel, short story; elements, principles and characteristics; examples.

Three units; second semester.

56A-56B. Survey of English Literature

The aim of this course is to give the student a better acquaintance with examples of English Literature which reveal the development of thought and ideals from the Anglo-Saxon period to the middle of the nineteenth century. The work consists of readings in the masterpieces, class discussions, occasional lectures and written reports.

Three units; both semesters. (Not offered in 1929-1930.)

60. Periodical Literature

A study of current literature, in content and form, as presented by periodicals, with the purpose of promoting intelligence and discrimination in reading with immediate interest. Discussions and written papers dealing with content, essays, fiction and poetry.

Three units; either semester.

Upper Division Courses

101. Modern Prose Fiction

A study of recent and contemporary fiction in drama, novel, and short story beginning with Meredith and including the best British and American fiction of today.

Three units; second semester.

106A-106B. Advanced English Composition.

F. L.

A laboratory course in modern prose writing. First semester, artistic narrative with description. Second semester, the essay, the magazine article, criticism, newspaper syndicate article. Outside readings. Prerequisite: One year of English composition.

Three units; both semesters. (Either semester may be taken first.)

117. Shakespeare

Extensive reading of Shakespeare's plays, with special attention to a selection of the comedies and another of the tragedies. Lectures and special studies.

Three units; first semester.

118. Makers of Eighteenth Century Literature

A study of Pope, Swift, Johnson, Goldsmith, Fielding, Burns, and the contemporaries as interpreters and teachers of their age. Open to upper division students.

Three units; first semester.

119. The Romantic Poets

A study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

Three units; first semester.

Browning and His Contemporaries

OUTCALT

Study of Tennyson and Browning and their contemporaries and successors, English poetry to nineteenth century life and thought.
Three units; second semester. (Not offered in 1929-1930.)

10B. American Literature

OUTCALT

Survey of American literature and its backgrounds from 1607 to the Civil

War; first semester.

Continuation of American literature, with its backgrounds from the Civil War to the present time, giving special attention to the development of prose fiction in the novel, short story and drama.

Three units; second semester.

11. Essays on Problems of Modern Life

BRYSON

This course is limited to thirty upper division students. Papers and discussions.
Three units; second semester.

12. Medieval Literature

BAGLEY

Study of the literature of the fourteenth century, especially the verse romances, *Piers Plowman*, and the poetry of Chaucer. Open to upper division students.

Three units; second semester.

13. Milton and Dryden

ADAMS

Studies in the poetry of the seventeenth century, relating it to the thought and social life of the age.

Three units; second semester.

JOURNALISM

Preparation for the Major in Journalism (lower division): History 4A-4B or Political Science 1A-1B, English 52A-52B or 56A-56B; Typewriting 2A, Speech 1A-1B, Psychology 2A-2B, Journalism 51A-51B. Recommended: Social Science 50, Anthropology 1A-1B, English 4, 60, Music 3A-3B or Art 1A-1B, Commercial Law 18A-18B.

The aim of the course in Journalism is twofold: (1) To provide studies in the departments of instruction—English, History, Economics, and Political Science which constitute a foundation essential to the successful pursuit of Journalism as a profession; (2) to offer introductory courses in the principles and practice of Journalism, supplemented by lectures of specialists in the field and by practical work in gathering and writing for student publications and for the local daily press.

14. News Gathering and Reporting

F. L. SMITH

Study of news sources and practice in news writing. Newspaper organization.
Three units; first semester.

15. News Editing and Correspondence

F. L. SMITH

Practice in copyreading, proofreading, headline writing, makeup. Study of news

Three units; second semester.

16B. English-Journalism Applied

F. L. SMITH

Credit is earned by actual work throughout a full semester as editor of "The Student," "El Palenque," or "Del Sudoeste"; or for specified staff work throughout the semester.

Three to three units; each semester.

SPEECH ARTS

Preparation for the Major in Speech Arts (lower division); Speech Arts 1A-1B, Speech Arts 3A and 5A or Speech Arts 55A-55B.

Lower Division Courses

17. Elements of Public Speaking

JONES

Training in fundamental processes of oral expression; methods of obtaining and organizing material; outlining; principles of attention and delivery; extemporaneous speaking and open forum debating; practice in construction and delivery of all forms of speech.

Three units; both semesters.

3A. Advanced Public Speaking

Survey of public speaking methods. Study of selections; observation of acting in community. Organization and delivery of speeches. Analysis of problems in speech making. Participation in a public debate or oratorical or the presentation of an equivalent amount of practical speaking before assemblies is required.

The membership of the class is limited to twenty.

Before electing the course students must consult the instructor in charge.

Two units; second semester.

5A. Argumentation and Debate

A study of the obtaining and organizing of evidence and the constructive use of the brief; study and discussion of current issues; the presentation of oral and informal debates. Attention will be given to intramural and intercollegiate debating.

Three units; first semester.

55A-55B. Play Production

History and technique of dramatic production, with special emphasis on contemporary drama. Practical working knowledge of different types of plays; rehearsal and presentation. Arranged for students interested in all the theatrical arts.

Three units; both semesters.

55C-55D. Dramatic Interpretation

Use of speaking voice, correct diction, gesture, and pantomime. Principles of characterization and standards of acting. Rehearsals and presentation of plays.

Three units; both semesters.

Upper Division Courses

155A-155B. Dramatic Workshop

Advanced work along lines of student's individual dramatic interests: directing, staging, costuming, play writing, etc. Special attention given to work and practical experience afforded those wishing educational, recreation or community drama training for professional use.

Three units; both semesters.

FINE ARTS

The Major in Fine Arts is not offered for the Liberal Arts Degree. Preparation for an Art Major—Art 1, A-B, 6A-B and two additional units in lower division.

The Teaching Major in Fine Arts for the A.B. degree in Education with a Junior High School Credential.

Lower division—Art A-B, 6A-6B, and four units of lower division art should be taken to choose prerequisites for upper division courses. Ind. Art is recommended.

Upper division—Art 110A-110B, 195 and five units of upper division art.

For special secondary certification in Fine Arts see the course in Art Education.

Lower Division Courses

A. Freehand Drawing

KELLY, J.

Problems involving principles of perspective are given to develop ability to draw and technique in pencil, charcoal, etc.

Two units; first semester.

B. Freehand Drawing, Painting and Sketching

Drawing from costume pose, outdoor sketching and problems involving various color mediums. Prerequisite: Art A.

Two units; second semester.

1. Art Fundamentals

An illustrated lecture course intended to increase appreciation and give understanding of the elements and principles of art as expressed in the architecture, painting, sculpture and crafts of the past and present.

Two units; either semester.

6A. Art Structure

Fundamentals of design and composition and theory of color. This is the first course used as prerequisite for all advanced art work both in the Educational and Liberal Arts fields.

Two units; either semester.

Structure (Continued) BENTON, MOON
 nal, creative work in design with special stress on structural and industrial and modern tendencies. Prerequisite: 6A.
 units; either semester.

Advanced Design BENTON, KELLY
 gn applied to textiles and objects involving dyeing, painting and various s. Prerequisite: 6A-6B.
 units; first semester.

Letters and Advertising KELLY
 gn in relation to lettering, commercial advertising and posters. Prerequisite: 6A.
 units; second semester.

Painting KELLY
 course especially designed to develop technique in various media in color from figure and landscape. Prerequisite Art A-B.
 unit; first semester.

Painting* KELLY
 inuation of 15A with special stress on landscape. Prerequisite: Art A-B,
 unit; second semester.

Costume Design KELLY, MOON
 gn studied in relation to modern dress for general and individual types. Course includes study of foreign and historic influences on dress; original s; sketching from costumes in the shops and demonstrations with models. Prerequisite: 6A.
 units; first semester.

Upper Division Courses

Art History and Appreciation MORRIS, MOON
 study of architecture, sculpture, painting and handicraft from the dawn of the Renaissance, through illustrated lectures, research and discussion. Prerequisite: 1A.
 units; first semester.

Art History and Appreciation POLAND, MOON
 e procedure as 1A but covering that period from the Renaissance to the School. Prerequisite: 1A.
 units; second semester.

Life Drawing*

Life Painting and Portraiture*

Advanced Painting*

Advanced Composition* BENTON, KELLY
 gn in relation to imaginative composition and story illustration. Prerequisite: Art A-B, 15A, 6A-6B.
 units; first semester.

Stage Design BENTON
 ry of line, color and lighting. Original sets and costumes developed on miniature stage. Study of the development of modern art of the theater. This leads to the advanced stage craft course 152C. Prerequisite: 6A.
 e units; first semester.

Stage Costume KELLY
 ract problems in designing costumes to express mood and practical problems in making costumes for productions. Prerequisite: 6A, 152A.
 e units; second semester.

Stage Craft JONES
 y of stage terminology and technique. Scene building and decoration. Props and their treatment for stage effect. Actual experience in setting, costuming and lighting productions. Prerequisite: 152A.
 e units; second semester.

195. Home Decoration

House planning and landscaping, interior decoration, study of period style, modern decoration. Illustrated lectures and laboratory problems. Prerequisite: Three units; second semester.

* Should these courses not be offered in 1929-30, the equivalent can be taken at the San Diego Academy of Fine Arts. Full credit is given for any course at the academy upon presentation of work and transcript of record.

FOREIGN LANGUAGES

Preparation for the Major in a Foreign Language (lower division): Required units of credit in the language chosen for the major. Recommended: History.

Preparation for the Group Major in Romanic Languages (lower division): French A, B, C, D, and Spanish A, B, C, D.

The Group Major (upper division): Eighteen upper division units in language or twelve units in one language and six units in the other.

The group major requirements are based on the assumption that the student will have taken courses in the high school which are equivalent to the college in elementary French or Spanish. A student who offers matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for the third semester of the college.

Lower Division Courses

Elementary French

Intensive study of French grammar and syntax; daily written work done in class; class drill in conversational idiom and pronunciation; reading with discussion and résumés; dictation; introduction to contemporary prose and study of the principles of French prosody, with memory work.

A. Elementary French

CRAMER, P.

Five units; first semester.

B. Elementary French

CRAMER, P.

Prerequisite: French A or two years of the high school course in French or its equivalent.

Five units; second semester.

Intermediate French

Reading and composition: Study of standard prose as a basis for class discussion; collateral reading with résumés and written reports in French; study of French prosody, with selections for memorizing; dictation. Class work conducted in French. Individual conferences.

C. Intermediate French

L. P.

Prerequisite: French B or three years of the high school course in French or its equivalent.

Three units; first semester.

D. Intermediate French

L. P.

Prerequisite: French C or four years of the high school course in French or its equivalent.

SC. French

L. P.

Scientific French. Prerequisite: French B or three years of high school or its equivalent.

Two units; first semester.

Upper Division Courses

101A-101B. French

E. M.

Conversation and Composition. Prerequisite: French D, or its equivalent with grade of C. (Not offered in 1929-1930.)

Three units; both semesters.

102A-102B. Introduction to French Classics

E. M.

Prerequisite: French D or its equivalent.

Three units; both semesters. (Not offered in 1929-1930.)

105A-105B. Modern French Drama

E. M.

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, Hauptmann, Maeterlinck, Rostand and others will be read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D, or consent of instructor.

Three units; both semesters. (Not offered in 1929-1930.)

9B. Survey of French Literature

L. P. BROWN

course is intended to give a broad foundation for further study in French. The chief movements and writers from the sixteenth through the nineteenth centuries are studied, with selected readings. Prerequisite: French D or of instructor.
e units; both semesters.

Lower Division Courses

Elementary German

pronunciation, reading and grammar, with practice in simple conversation, narrative description, both oral and written.

Elementary German

CRAMER

units; first semester.

Intermediate German

CRAMER

Prerequisite: German A or two years of the high school course in German, or equivalent.

units; second semester.

Intermediate and Scientific German

course furnishes the regular preparation for the upper division courses.

Intermediate and Scientific German

CRAMER

course may be taken as a three-unit course in literature or as a five-unit course combining literature and science. Prerequisite: German B with a grade of C or three years of high school German.

three or five units; first semester.

Intermediate and Scientific German

CRAMER

second semester; same as C. Prerequisite: German C with a grade of C or three years of high school German.

three to five units; second semester.

Lower Division Courses

Elementary Spanish

comprehensive study of Spanish grammar and syntax, with daily written work; drill in conversational idiom and pronunciation; reading with oral discussion; summaries; dictation; introduction to contemporary prose writers; study of the laws of Spanish prosody, with memory work.

Elementary Spanish

L. P. BROWN, PHILLIPS

units; first semester.

Intermediate Spanish

L. P. BROWN, PHILLIPS

Prerequisite: Spanish A or two years of the high school course in Spanish, or equivalent.

units; second semester.

Intermediate Spanish

Reading and composition: study of standard prose as basis for class work; oral reading in prose and drama, with written reports in Spanish; a study of Spanish prosody, with selections for memorizing; dictation. Class work conducted in Spanish. Individual conferences.

Intermediate Spanish

PHILLIPS

Prerequisite: Spanish B or three years of the high school course in Spanish, or equivalent.

three units; first semester.

Intermediate Spanish

PHILLIPS

Prerequisite: Spanish C or four years of the high school course in Spanish, or equivalent.

three units; second semester.

Upper Division Courses

101B. Spanish

L. P. BROWN

Conversation and composition. Prerequisite: Spanish D, or its equivalent, with grade of C.

three units; both semesters. (Not offered in 1929-1930.)

102A-102B. Introduction to Spanish Classics

L. P.

This course will introduce the student to the several types of classical literature. Reading will be: Gil Blas, and other novels of Roguery; one drama each; works of Lope de Vega, Calderon, Alarcon, and Moreto; selections from Quixote, and the Cien Mejores Poesias Castellanas; collateral reading and Prerequisite: A grade of C in Spanish D or permission from the instructor.

Three units; both semesters. (Not offered in 1929-1930.)

105A-105B. Modern Spanish Drama

L. P.

This course will trace the development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Three units; both semesters. (Not offered in 1929-1930.)

110A-110B. Novel and Short Story in Spain

L. P.

This course will trace the development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Three units; both semesters.

GEOGRAPHY

Preparation for the Major in Geography (lower division): Geography 1A. Recommended: A reading knowledge of French or German.

Lower Division Courses

Introduction to Geography; Elements

CLAB

This course deals with the fundamental principles of Geography, with the distribution of life upon the earth and with the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and location are related to human activities. Open to all students.

Geography 1, three units; either semester.

Geography 1A, two units; either semester (for teacher-training students)

Introduction to Geography; Natural Regions and the Distribution of Population and of Cultures

CLAB

This course applies the fundamental principles of Geography to the natural regions of the world. The regions are compared with regard to different types of development. Prerequisite: Geography 1 or 1A.

Geography 2, three units; either semester.

Geography 2A, two units; either semester (for teacher-training students)

3. Elementary Meteorology

An elementary study of the earth's atmosphere and changes in it which influence our weather and human affairs. Special attention will be given to conditions, instruments and records.

Three units.

Upper Division Courses

113. Climatology

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention is given to the climate of different parts of the United States. Prerequisite: Meteorology.

Three units.

116D. Geography of South America

This course deals with the climate, topography and natural resources of South American countries, and with the effect of those physical factors upon economic, commercial and racial problems of the different nations. Prerequisite: Geography 1 or 1A.

Three units.

117. Geography of Europe

This course deals with the physical environment of each of the nations and their reactions to physical environment in their political and social relations. It is planned so as to be of value to all students who wish to familiarize themselves with modern Europe to be able to read current periodical literature with interest and understanding. This course introduces the students to the smaller as well as the larger of the European countries. Prerequisite: Geography 1 or 1A.

Three units; second semester.

Geography of North America

CLARK

Study of the natural regions of North America, their formation, occupations and historical development. Prerequisite: Geography 1 or 1A.
One unit; first semester.

Geography of Asia

SUHL

Study of the cultural regions of Asia, their physical environment and historical development. Prerequisite: Geography 1 or 1A.
One unit; second semester.

Economic Geography

SUHL

World-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 or 1A and 2 or 2A.
One unit; first semester.

Geology

SUHL

1A.
General Geology. A study of the surface features of the earth, agencies and processes of change and evolution of topographic forms.
One unit; either semester.

1B.

Historical Geology. Origin and geological history of the earth and of its land and plant life. Prerequisite: Geology 1A.
One unit.

HEALTH AND PHYSICAL EDUCATION

WOMEN'S DEPARTMENT

New students are given a medical examination to the end that the physical condition of each student may be determined and her class work planned accordingly. Four hours weekly of directed physical activity are required in freshman and sophomore years. Emphasis is upon Rhythmic Activities, Games and Sports.

Lower Division Courses

2.

TANNER

Informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social Hygiene is studied in its relation to the practical problems of young women and prospective home makers. Laws and procedures in local civic health matters of particular interest to women are studied in detail. Reports following personal investigation of at least two major topics are required for each member, these reports being given and discussed before the class. Required of all women in the freshman year taking the Liberal Arts curricula and of Majors in Physical Education.
One unit; either semester.

Formalized Activities and Group Games

RAW AND ASSISTANTS

One-half unit.

Equipment and Apparatus

RAW AND ASSISTANTS

One-half unit.

Athletic Games and Sports

RAW AND ASSISTANTS

For Liberal Arts and candidates for the Junior High School Credential.)

One-half unit.

Recreational Activities

RAW AND ASSISTANTS

For Elementary School Credential.)

One-half unit.

Rhythmical Activities

RAW AND ASSISTANTS

One-half unit.

Recreational Activities

TANNER

Games suitable for large or small groups in elementary and junior high schools studied and played. These include rhythmic activities, games of low organization and modified athletic games.
One-half unit; both semesters.

Administration of Physical Education

TANNER

Consideration of physical education problems, administration of tests, methods of motivating children for play activities, developing leaders, and carrying on intra-

mural ideals. Particular attention is given Posture problems. The content of the administration of the state program in physical education forms the basis of the course.

Two units; either semester.

Upper Division Courses

151. Health Education

A course for teacher-training students which includes the study of the common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear in the school; and the principles which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the school room, seating, lighting and ventilation.

Two units; either semester.

155. Applied Anatomy

A study of the mechanics of the human skeletal and muscular systems, analysis of their actions in games, formalized activities and general body movements, mechanical strength and durability as influenced by anatomical factors considered.

Two units; one semester.

101. Emergencies

(See Men's Department.)

One unit.

170. Recreational Leadership

TANNER AND

Fundamentals of recreational leadership are developed by instruction in Camp Craft, Camp Fire lore, the study of school recreational needs and facilities, and civic recreation.

Two units; one semester.

174. Campcraft

TANNER AND

The technique of life in open camp is developed by camp experience, preceded by study of selection of equipment, proper outing clothes, tents, beds in the open, making camp fires, camp cooking and camp recreations. Permission only by permission of the Instructor. Fee \$2.50.

Two units.

CLVII. Sports Methods

Practice for skill, study of rules and of coaching methods. Prerequisite: season's experience in at least four of the following sports—Volley ball, basketball, hockey, speedball, soccer, baseball, tennis and track.

Two units; both semesters.

CLVIII. Stunts and Tumbling

One-half unit.

CLX. Formalized Activities

(See Men's Department.)

Two units.

CLXI. Folk Dancing

A series of folk and national dances for elementary and junior high schools. Emphasis is placed on methods of presentation as well as upon ability to perform the various dances. Note books are required.

Two units.

CLXIV. Character Dancing, Clogging, Interpretative Dancing

Two units; one semester.

CLXXII. Principles of Physical Education

Prerequisite: Junior standing.

Two units; one semester.

CLXXIII. Physical Education Tests and Measurements

Two units; one semester.

HEALTH AND PHYSICAL EDUCATION

MEN'S DEPARTMENT

Two-hour course is required for the two years of lower division. Medical attention is given each student when entering and the work is fitted, as far as to his needs. Physical efficiency tests are given at the beginning in order to the student as to his physical ability. These are repeated at the beginning of three succeeding semesters in order to note improvement and arrange of program so as to acquire all-round development. The content of the two years is planned to give each student fundamental training in those which have carry-over value into after life.

Lower Division Courses

C. E. PETERSON

1. Informational course in personal and community hygiene required of all the freshman year. The course includes a study of Sex Hygiene and the Principles of Exercise, Bathing, Sleep, etc. Civic Hygiene is vitalized by investigations by each student of special topics, the means by which the local community is protected and improved, providing subjects for study. Lectures, reference reading, special topics, discussions, oral and quiz.

unit; either semester.

(1 semester; Freshman year.) Marching, Calisthenics, Self-defense and Field Fundamentals.

half unit.

(Spring semester.) Tennis, Swimming and Golf.

half unit.

(1 semester; Sophomore year.) Instruction and competition in Handball, Ball and Touch Football.

half unit.

(Spring semester.) Instruction and competition in Volley Ball, Baseball and

half unit.

Opportunity is given all students to take part in the regular competitive sports

or B. Track. One-half unit; second semester.

or B. Baseball. One-half unit; second semester.

or B. Basket Ball. One-half unit; second semester.

or B. Tennis. One-half unit; either semester.

or B. Boxing. One-half unit; either semester.

or B. Wrestling. One-half unit; either semester.

or B. Cross country. One-half unit; first semester.

or B. Swimming. One-half unit; first semester.

or B. American Football. One-half unit; first semester.

Students fulfilling Degree requirements for Physical Education Majors and meeting requirements for Teaching Credentials in Physical Education.

Administration of Physical Education

C. E. PETERSON

This course presents the problems that arise in the everyday experience of the student in physical education, such as policies in administration, classification of students, administration of activities, the organization of the leadership of the physical education department, the arrangement and care of the physical equipment, personal relationships with students, interdepartmental adjustments, rolls, records, reports, etc. as presented in latest State Department Manual used as basis.

units; either semester.

Upper Division Courses

C. E. PETERSON AND STAFF

Emergencies.

This course covers the accepted procedure in meeting the emergencies which daily arise in the school room, play or athletic field, beach, mountains or any of the many places where the physical director is called on for first aid. Special attention is given to the arrangement of the apparatus and the activities so that many of the common accidents are prevented or minimized.

unit; one semester.

Health Education

(Women's Department.)

units; either semester.

155. Applied Anatomy

A study of the mechanics of the human skeletal and muscular systems, analysis of their actions in games, formalized activities and general body movement. Mechanical strength and durability as influenced by anatomical factors are considered.

Two units; one semester.

171. Community Recreation

C. E. PETERSON AND

This course is planned to meet the needs of the various workers in community playground systems apart from schools as well as the needs of directors of physical recreation in social service institutions, industrial plants, shops and factories. Special attention is given to scout and campcraft, the elementary training of a scoutmaster being part of the course.

Two units; second semester.

CLIV A-B. Methods in Coaching Competitive Athletics.

C. E. PE

The presentation of different systems of teaching competitive athletics in schools. This course will parallel the major sport in season and time will be spent on both the theory and practice of the most successful systems. Sports covered: American Football, Basket Ball, Baseball, Track and Field, and Tennis.

Two units; both semesters.

CLX. Formalized Activities

C. E. PE

Systems, value, method and progression. Typical lessons for correct and responsive work. The use of wands, clubs and dumb-bells. Emphasis to be placed on progression and method of presenting the material. The simplest and most explanatory terminology. Theoretical and practical work.

Two units; second semester.

CLXII. Gymnastic Stunts or Self-Testing Activities

B

In this course simple stunts on the more popular gymnasium apparatus are practiced. A great variety of nonapparatus stunts are also practiced including free building. The idea behind the course is to make the students proficient in the performance of a great group of gymnastic stunts, which are always popular in the gymnasium and on the playground. This work is of the recreational and interesting type rather than the formal.

Two units; second semester.

CLXXII. Principles of Physical Education.

Two units.

CLXVI. Technique of Officiating

B

This course covers methods of officiating all the sports common to the secondary college program, also methods of training student officials. Practice is given in the handling of elementary, junior high, high school and interclass college competition.

One unit; both semesters.

CLXXIII. Physical Education Tests and Measurements

Two units; one semester.

HISTORY

Preparation for the Major in History (lower division): History 4A-4B or 5A-5B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1A-1B. No student shall take more than one of the three History courses at one time.

Students who wish to major in History and who have had less than two years of European History in the High School must take History 5A-5B or 4A-4B.

The Major (upper division): Twenty-four units of upper division work in History to be arranged in consultation with the chairman of the department. Each student must, in his senior year, write a term paper, the subject matter of which shall be arranged in consultation with the department.

Lower Division Courses

4A-4B. History of Modern Europe

The development of Western European society, politics and institutions from about 1500 A. D. to the present time. The first half-year's work extends to the Congress of Vienna. Library deposit, \$2.50.

Three units; both semesters.

8A-8B. History of the Americas

A general survey of the history of the western hemisphere from the discovery of the continent to the present time. Emphasis is placed on the planting of European civilization.

in hemisphere, the international contest for the continents, the wars for
ice, the development of the American republics, and their relations with
er and the rest of the world. The course is based on H. E. Bolton's
of the History of the Americas." Library deposit, \$1.25.
units; both semesters.

History of England

NASATIR

vey of the more important political, constitutional and cultural phases
in development. The course is advised as a preliminary study for students
an history and government. Library deposit, \$2.50.
units; both semesters.

Upper Division Courses

A. Ancient History

LESLEY

reek history to the Roman conquest. B. Roman history to the sixth century.
deposit, \$2.50.
units; both semesters.

B. Medieval History

LESLEY

eral survey of European history from about 500 to 1500 A. D.
units; both semesters. (Not offered in 1929-1930.)

C. Europe Since 1789

LESLEY

Revolutionary Era in Europe; the conflict of Reaction and Liberalism;
strial Revolution; the development of Nationalism, with special attention
nification of Germany and Italy; political problems of contemporary
resulting from the World War. Library deposit, \$2.50.
units; both semesters. (Not offered in 1929-1930.)

D. Diplomatic History of Europe

LESLEY

dy of European diplomatic and colonial policies since 1648, with detailed
to the basic factors in international organization and procedure. During
d semester special emphasis is placed on the period, 1870-1928. Library
2.50.
units; both semesters.

E. History of British Expansion

NASATIR

dy of the growth, development, and break-up of the older overseas
the beginnings of the newer Empire after 1783; the rise, federation and
relations of the self-governing Dominions; the crown colony system;
der British rule; and British expansion in Africa and the Pacific.
units; both semesters. (Not offered in 1929-30.)

F. The Rise of the American Nation

LEONARD

English colonization in North America and the development of colonial institu-
tional politics. B. The revolutionary movement and the Revolutionary War;
lishment of the government under the Constitution to about 1840. Library
\$2.50.
units; both semesters. (Not offered in 1929-1930.)

G. The Expansion of the United States

LEONARD

dy of the Mexican War and the slavery controversy, the Civil War and
suction, and the growth and progress of the United States to about 1920.
ry deposit, \$2.50.
units; both semesters. (Not offered in 1929-1930.)

H. History of the West

NASATIR

rtorial growth of the United States; the diplomacy and politics of expan-
sion settlement and development of the West and the influence of expansion
merican institutions and upon international affairs at each stage of the
units; both semesters. (Not offered in 1929-1930.)

INDUSTRIAL ARTS

A. Bench Work in Wood

amental tool and joining operations.
units; both semesters.

3A. Mechanical Drawing

Use and care of instruments, lettering, geometrical problems, orthographic projections, revolution, developments, intersections, tracing and blue printing. Six hours per week.

Three units; either semester.

3B. Advanced Mechanical Drawing

Shop problems, detailed working and machine drawing, and topographical drawing. Nine hours per week. Prerequisite: 3A.

Three units; either semester.

8A-8B. Pattern Making

Principles of pattern making and the use of bench and machine tools.

Two units; both semesters.

11. Shadow Projection and Linear Perspective

Shade and shadow on plane and warped surfaces, elements of perspective, perspective of shadow. Six hours per week. Prerequisite: 3A.

Two units; either semester.

18. Lettering

Single stroke Gothic, block, old and modern Roman titles, etc. Six hours per week. Prerequisite: 3A.

Two units; either semester.

61A. Elements of Industrial Arts

Practical problems in the handling of industrial materials such as clay and pottery, paper making, bookbinding, weaving, basketry. Also the related subject matter and the use of industrial arts information and skills.

Two units; either semester.

61B. Elements of Industrial Arts

Practical problems in the handling of industrial materials involving assembly operations in wood, sheet metal and concrete. Supplies and materials, various projects and the relation and contribution of industrial arts to other industries. Industrial arts as contributing to the evolution of civilization.

Two units; either semester.

MATHEMATICS

Preparation for the Major in Mathematics (lower division) required: mathematics 3A, 3B, 5A-5B. Recommended: Physics 2A-2B or 1A-1B and a knowledge of French and German.

Lower Division Courses

1A-1B. Elementary Functions

LIV

Theory and use of algebraic, trigonometric, logarithmic and exponential functions; adapted to the needs of individual students. Prerequisite: Elementary algebra and plane geometry. Mid-year students may enter only by arrangement with the department.

Three units; throughout the year.

2. Mathematics of Investment

Interest and annuities; amortization; sinking funds; valuation of bonds and mortgages; mathematics of building and loan associations; mathematics of insurance. Prerequisites: Plane trigonometry and two years of high school mathematics 1A-1B.

3A-3B. Analytic Geometry and Calculus

LIVINGSTON AND M

A unified course in analytic geometry and differential calculus, together with an introduction to the integral calculus. The work of the first semester is done in itself and may be elected by those wishing only an introductory course. Prerequisites: Trigonometry, plane and solid geometry and two years of algebra and high school. Students lacking one or two semesters of the high school mathematics should ordinarily take part or all of 1A-1B, before or concurrently with 3A-3B, according to the judgment of the department.

Three units; throughout the year.

4A-4B. Engineering Mathematics

This course includes analytic geometry, both plane and solid; calculus, differential and integral with special emphasis on their practical use in engineering work.

Three units; both semesters.

Higher Analysis

LIVINGSTON

ed course in algebra, trigonometry, analytic geometry and calculus with
s in the life sciences, social sciences and physical sciences. The acquisi-
good technique is emphasized. Prerequisite: Mathematics 3A-3B.
units; both semesters.

ction to Projective Geometry

nstruction and study of conic sections by means of perspectives, poles
and involutions. Prerequisite: Plane trigonometry.
units; second semester.

Upper Division Courses

mentary Geometry for Advanced Students

LIVINGSTON

l topics viewed from the standpoint of higher mathematics. Prerequisites:
es 3A-3B, or equivalent.
units; first semester.

mentary Algebra for Advanced Students

LIVINGSTON

l topics viewed from the standpoint of higher mathematics. Prerequisites:
es 3A-3B, or equivalent.
units; second semester.

y of Equations

e solutions of algebraic equations; approximate numerical solutions;
s. Prerequisites: Mathematics 5A-5B.
units; first semester. (Not offered in 1929-1930.)

tic Geometry of Space

lines and quadric surfaces. Prerequisites: Mathematics 5A-5B.
units; second semester. (Not offered in 1929-1930.)

MUSIC

tion for the Major in Music (lower division): Music 1A-1B, 2A-2B,

ourses are arranged with a particular view to offering everything included
ired preparation for the Secondary Teaching Credential in Music.

Lower Division Courses

Singing and Ear Training

L. D. SMITH

the first semester of the course "Music 1A-1B—Sight Singing and Ear
It includes, besides training and drill in sight singing and ear training,
ts and materials of music; elementary musical theory; musical forms
of performance; with considerable listening to music by means of the
. Prerequisite to all music teaching courses.
its.

Singing and Ear Training

L. D. SMITH

ourse includes tonal and rhythmic dictation, rhythmic writing, sight-
sing Latin syllables and with words. Text—Wedge: Ear training and
ing. Prerequisite: Music 1A.
its; second semester.

Advanced Sight Singing and Ear Training.

L. D. SMITH

nd rhythmic dictation, rhythmic writing and sight singing in two, three,
parts. Text—Wedge: Advanced ear training and sight singing. Pre-
Music 1A-1B.
its; both semesters.

Appreciation and History of Music

BEIDLEMAN

ed of what music is made. How to listen to, enjoy, and appreciate it.
oment of music from the earliest times, with a particular effort to gain
intance with the music of the various periods and composers by listen-
ples of it. Illustrated with numerous phonograph records. A general
l, and nontechnical course, requiring no previous musical training or
its; both semesters.

4A-4B. Harmony (Elementary)

Scale construction, intervals, chords, structure, modulation, through types of seventh chord. Especial attention is paid to the keyboard applications in harmonization, transposition, and modulation. Prerequisite: 1A-1B or 1C-1D or 1E-1F or 1G-1H or 1I-1J or 1K-1L or 1M-1N or 1O-1P or 1Q-1R or 1S-1T or 1U-1V or 1W-1X or 1Y-1Z or 1AA-1AB or 1AC-1AD or 1AE-1AF or 1AG-1AH or 1AI-1AJ or 1AK-1AL or 1AM-1AN or 1AO-1AP or 1AQ-1AR or 1AS-1AT or 1AU-1AV or 1AW-1AX or 1AY-1AZ or 1BA-1BB or 1BC-1BD or 1BE-1BF or 1BG-1BH or 1BI-1BJ or 1BK-1BL or 1BM-1BN or 1BO-1BP or 1BQ-1BR or 1BS-1BT or 1BU-1BV or 1BW-1BX or 1BY-1BZ or 1CA-1CB or 1CC-1CD or 1CE-1CF or 1CG-1CH or 1CI-1CJ or 1CK-1CL or 1CM-1CN or 1CO-1CP or 1CQ-1CR or 1CS-1CT or 1CU-1CV or 1CW-1CX or 1CY-1CZ or 1DA-1DB or 1DC-1DD or 1DE-1DF or 1DG-1DH or 1DI-1DJ or 1DK-1DL or 1DM-1DN or 1DO-1DP or 1DQ-1DR or 1DS-1DT or 1DU-1DV or 1DW-1DX or 1DY-1DZ or 1EA-1EB or 1EC-1ED or 1EE-1EF or 1EG-1EH or 1EI-1EJ or 1EK-1EL or 1EM-1EN or 1EO-1EP or 1EQ-1ER or 1ES-1ET or 1EU-1EV or 1EW-1EX or 1EY-1EZ or 1FA-1FB or 1FC-1FD or 1FE-1FF or 1FG-1FH or 1FI-1FJ or 1FK-1FL or 1FM-1FN or 1FO-1FP or 1FQ-1FR or 1FS-1FT or 1FU-1FV or 1FW-1FX or 1FY-1FZ or 1GA-1GB or 1GC-1GD or 1GE-1GF or 1GG-1GH or 1GI-1GJ or 1GK-1GL or 1GM-1GN or 1GO-1GP or 1GQ-1GR or 1GS-1GT or 1GU-1GV or 1GW-1GX or 1GY-1GZ or 1HA-1HB or 1HC-1HD or 1HE-1HF or 1HG-1HH or 1HI-1HJ or 1HK-1HL or 1HM-1HN or 1HO-1HP or 1HQ-1HR or 1HS-1HT or 1HU-1HV or 1HW-1HX or 1HY-1HZ or 1IA-1IB or 1IC-1ID or 1IE-1IF or 1IG-1IH or 1II-1IJ or 1IK-1IL or 1IM-1IN or 1IO-1IP or 1IQ-1IR or 1IS-1IT or 1IU-1IV or 1IW-1IX or 1IY-1IZ or 1JA-1JB or 1JC-1JD or 1JE-1JF or 1JG-1JH or 1JI-1JJ or 1JK-1JL or 1JM-1JN or 1JO-1JP or 1JQ-1JR or 1JS-1JT or 1JU-1JV or 1JW-1JX or 1JY-1JZ or 1KA-1KB or 1KC-1KD or 1KE-1KF or 1KG-1KH or 1KI-1KJ or 1KK-1KL or 1KM-1KN or 1KO-1KP or 1KQ-1KR or 1KS-1KT or 1KU-1KV or 1KW-1KX or 1KY-1KZ or 1LA-1LB or 1LC-1LD or 1LE-1LF or 1LG-1LH or 1LI-1LJ or 1LK-1LL or 1LM-1LN or 1LO-1LP or 1LQ-1LR or 1LS-1LT or 1LU-1LV or 1LW-1LX or 1LY-1LZ or 1MA-1MB or 1MC-1MD or 1ME-1MF or 1MG-1MH or 1MI-1MJ or 1MK-1ML or 1MM-1MN or 1MO-1MP or 1MQ-1MR or 1MS-1MT or 1MU-1MV or 1MW-1MX or 1MY-1MZ or 1NA-1NB or 1NC-1ND or 1NE-1NF or 1NG-1NH or 1NI-1NJ or 1NK-1NL or 1NM-1NN or 1NO-1NP or 1NQ-1NR or 1NS-1NT or 1NU-1NV or 1NW-1NX or 1NY-1NZ or 1OA-1OB or 1OC-1OD or 1OE-1OF or 1OG-1OH or 1OI-1OJ or 1OK-1OL or 1OM-1ON or 1OO-1OP or 1OQ-1OR or 1OS-1OT or 1OU-1OV or 1OW-1OX or 1OY-1OZ or 1PA-1PB or 1PC-1PD or 1PE-1PF or 1PG-1PH or 1PI-1PJ or 1PK-1PL or 1PM-1PN or 1PO-1PP or 1PQ-1PR or 1PS-1PT or 1PU-1PV or 1PW-1PX or 1PY-1PZ or 1QA-1QB or 1QC-1QD or 1QE-1QF or 1QG-1QH or 1QI-1QJ or 1QK-1QL or 1QM-1QN or 1QO-1QP or 1QQ-1QR or 1QS-1QT or 1QU-1QV or 1QW-1QX or 1QY-1QZ or 1RA-1RB or 1RC-1RD or 1RE-1RF or 1RG-1RH or 1RI-1RJ or 1RK-1RL or 1RM-1RN or 1RO-1RP or 1RQ-1RR or 1RS-1RT or 1RU-1RV or 1RW-1RX or 1RY-1RZ or 1SA-1SB or 1SC-1SD or 1SE-1SF or 1SG-1SH or 1SI-1SJ or 1SK-1SL or 1SM-1SN or 1SO-1SP or 1SQ-1SR or 1SS-1ST or 1SU-1SV or 1SW-1SX or 1SY-1SZ or 1TA-1TB or 1TC-1TD or 1TE-1TF or 1TG-1TH or 1TI-1TJ or 1TK-1TL or 1TM-1TN or 1TO-1TP or 1TQ-1TR or 1TS-1TT or 1TU-1TV or 1TW-1TX or 1TY-1TZ or 1UA-1UB or 1UC-1UD or 1UE-1UF or 1UG-1UH or 1UI-1UJ or 1UK-1UL or 1UM-1UN or 1UO-1UP or 1UQ-1UR or 1US-1UT or 1UU-1UV or 1UW-1UX or 1UY-1UZ or 1VA-1VB or 1VC-1VD or 1VE-1VF or 1VG-1VH or 1VI-1VJ or 1VK-1VL or 1VM-1VN or 1VO-1VP or 1VQ-1VR or 1VS-1VT or 1VU-1VV or 1VW-1VX or 1VY-1VZ or 1WA-1WB or 1WC-1WD or 1WE-1WF or 1WG-1WH or 1WI-1WJ or 1WK-1WL or 1WM-1WN or 1WO-1WP or 1WQ-1WR or 1WS-1WT or 1WU-1WV or 1WW-1WX or 1WY-1WZ or 1XA-1XB or 1XC-1XD or 1XE-1XF or 1XG-1XH or 1XI-1XJ or 1XK-1XL or 1XM-1XN or 1XO-1XP or 1XQ-1XR or 1XS-1XT or 1XU-1XV or 1XW-1XZ or 1YA-1YB or 1YC-1YD or 1YE-1YF or 1YG-1YH or 1YI-1YJ or 1YK-1YL or 1YM-1YN or 1YO-1YP or 1YQ-1YR or 1YS-1YT or 1YU-1YV or 1YW-1YZ or 1ZA-1ZB or 1ZC-1ZD or 1ZE-1ZF or 1ZG-1ZH or 1ZI-1ZJ or 1ZK-1ZL or 1ZM-1ZN or 1ZO-1ZP or 1ZQ-1ZR or 1ZS-1ZT or 1ZU-1ZV or 1ZW-1ZX or 1ZY-1ZZ or 1AA-1AB or 1AC-1AD or 1AE-1AF or 1AG-1AH or 1AI-1AJ or 1AK-1AL or 1AM-1AN or 1AO-1AP or 1AQ-1AR or 1AS-1AT or 1AU-1AV or 1AW-1AX or 1AY-1AZ or 1BA-1BB or 1BC-1BD or 1BE-1BF or 1BG-1BH or 1BI-1BJ or 1BK-1BL or 1BM-1BN or 1BO-1BP or 1BQ-1BR or 1BS-1BT or 1BU-1BV or 1BW-1BX or 1BY-1BZ or 1CA-1CB or 1CC-1CD or 1CE-1CF or 1CG-1CH or 1CI-1CJ or 1CK-1CL or 1CM-1CN or 1CO-1CP or 1CQ-1CR or 1CS-1CT or 1CU-1CV or 1CW-1CX or 1CY-1CZ or 1DA-1DB or 1DC-1DD or 1DE-1DF or 1DG-1DH or 1DI-1DJ or 1DK-1DL or 1DM-1DN or 1DO-1DP or 1DQ-1DR or 1DS-1DT or 1DU-1DV or 1DW-1DX or 1DY-1DZ or 1EA-1EB or 1EC-1ED or 1EE-1EF or 1EG-1EH or 1EI-1EJ or 1EK-1EL or 1EM-1EN or 1EO-1EP or 1EQ-1ER or 1ES-1ET or 1EU-1EV or 1EW-1EX or 1EY-1EZ or 1FA-1FB or 1FC-1FD or 1FE-1FF or 1FG-1FH or 1FI-1FJ or 1FK-1FL or 1FM-1FN or 1FO-1FP or 1FQ-1FR or 1FS-1FT or 1FU-1FV or 1FW-1FX or 1FY-1FZ or 1GA-1GB or 1GC-1GD or 1GE-1GF or 1GG-1GH or 1GI-1GJ or 1GK-1GL or 1GM-1GN or 1GO-1GP or 1GQ-1GR or 1GS-1GT or 1GU-1GV or 1GW-1GX or 1GY-1GZ or 1HA-1HB or 1HC-1HD or 1HE-1HF or 1HG-1HH or 1HI-1HJ or 1HK-1HL or 1HM-1HN or 1HO-1HP or 1HQ-1HR or 1HS-1HT or 1HU-1HV or 1HW-1HX or 1HY-1HZ or 1IA-1IB or 1IC-1ID or 1IE-1IF or 1IG-1IH or 1II-1IJ or 1IK-1IL or 1IM-1IN or 1IO-1IP or 1IQ-1IR or 1IS-1IT or 1IU-1IV or 1IW-1IX or 1IY-1IZ or 1JA-1JB or 1JC-1JD or 1JE-1JF or 1JG-1JH or 1JI-1JJ or 1JK-1JL or 1JM-1JN or 1JO-1JP or 1JQ-1JR or 1JS-1JT or 1JU-1JV or 1JW-1JX or 1JY-1JZ or 1KA-1KB or 1KC-1KD or 1KE-1KF or 1KG-1KH or 1KI-1KJ or 1KK-1KL or 1KM-1KN or 1KO-1KP or 1KQ-1KR or 1KS-1KT or 1KU-1KV or 1KW-1KX or 1KY-1KZ or 1LA-1LB or 1LC-1LD or 1LE-1LF or 1LG-1LH or 1LI-1LJ or 1LK-1LL or 1LM-1LN or 1LO-1LP or 1LQ-1LR or 1LS-1LT or 1LU-1LV or 1LW-1LX or 1LY-1LZ or 1MA-1MB or 1MC-1MD or 1ME-1MF or 1MG-1MH or 1MI-1MJ or 1MK-1ML or 1MM-1MN or 1MO-1MP or 1MQ-1MR or 1MS-1MT or 1MU-1MV or 1MW-1MX or 1MY-1MZ or 1NA-1NB or 1NC-1ND or 1NE-1NF or 1NG-1NH or 1NI-1NJ or 1NK-1NL or 1NM-1NN or 1NO-1NP or 1NQ-1NR or 1NS-1NT or 1NU-1NV or 1NW-1NX or 1NY-1NZ or 1OA-1OB or 1OC-1OD or 1OE-1OF or 1OG-1OH or 1OI-1OJ or 1OK-1OL or 1OM-1ON or 1OO-1OP or 1OQ-1OR or 1OS-1OT or 1OU-1OV or 1OW-1OX or 1OY-1OZ or 1PA-1PB or 1PC-1PD or 1PE-1PF or 1PG-1PH or 1PI-1PJ or 1PK-1PL or 1PM-1PN or 1PO-1PP or 1PQ-1PR or 1PS-1PT or 1PU-1PV or 1PW-1PX or 1PY-1PZ or 1QA-1QB or 1QC-1QD or 1QE-1QF or 1QG-1QH or 1QI-1QJ or 1QK-1QL or 1QM-1QN or 1QO-1QP or 1QQ-1QR or 1QS-1QT or 1QU-1QV or 1QW-1QX or 1QY-1QZ or 1RA-1RB or 1RC-1RD or 1RE-1RF or 1RG-1RH or 1RI-1RJ or 1RK-1RL or 1RM-1RN or 1RO-1RP or 1RQ-1RR or 1RS-1RT or 1RU-1RV or 1RW-1RX or 1RY-1RZ or 1SA-1SB or 1SC-1SD or 1SE-1SF or 1SG-1SH or 1SI-1SJ or 1SK-1SL or 1SM-1SN or 1SO-1SP or 1SQ-1SR or 1SS-1ST or 1SU-1SV or 1SW-1SX or 1SY-1SZ or 1TA-1TB or 1TC-1TD or 1TE-1TF or 1TG-1TH or 1TI-1TJ or 1TK-1TL or 1TM-1TN or 1TO-1TP or 1TQ-1TR or 1TS-1TT or 1TU-1TV or 1TW-1TX or 1TY-1TZ or 1UA-1UB or 1UC-1UD or 1UE-1UF or 1UG-1UH or 1UI-1UJ or 1UK-1UL or 1UM-1UN or 1UO-1UP or 1UQ-1UR or 1US-1UT or 1UU-1UV or 1UW-1UX or 1UY-1UZ or 1VA-1VB or 1VC-1VD or 1VE-1VF or 1VG-1VH or 1VI-1VJ or 1VK-1VL or 1VM-1VN or 1VO-1VP or 1VQ-1VR or 1VS-1VT or 1VU-1VV or 1VW-1VX or 1VY-1VZ or 1WA-1WB or 1WC-1WD or 1WE-1WF or 1WG-1WH or 1WI-1WJ or 1WK-1WL or 1WM-1WN or 1WO-1WP or 1WQ-1WR or 1WS-1WT or 1WU-1WV or 1WW-1WX or 1WY-1WZ or 1XA-1XB or 1XC-1XD or 1XE-1XF or 1XG-1XH or 1XI-1XJ or 1XK-1XL or 1XM-1XN or 1XO-1XP or 1XQ-1XR or 1XS-1XT or 1XU-1XV or 1XW-1XZ or 1YA-1YB or 1YC-1YD or 1YE-1YF or 1YG-1YH or 1YI-1YJ or 1YK-1YL or 1YM-1YN or 1YO-1YP or 1YQ-1YR or 1YS-1YT or 1YU-1YV or 1YW-1YZ or 1ZA-1ZB or 1ZC-1ZD or 1ZE-1ZF or 1ZG-1ZH or 1ZI-1ZJ or 1ZK-1ZL or 1ZM-1ZN or 1ZO-1ZP or 1ZQ-1ZR or 1ZS-1ZT or 1ZU-1ZV or 1ZW-1ZX or 1ZY-1ZZ

Three units; both semesters.

Upper Division Courses

105A-105B. Applied (Advanced) Harmony

Completion of harmonic theory—modulation, inharmonic tones, etc. Musical and elementary musical composition. Harmonic and form analysis. Treatment of harmony. Prerequisite: 4A-4B.

Two units; both semesters.

107A. Conducting

The technique of the baton. Methods and materials for use in direct and instrumental organizations. Prerequisite: 1A-1B, or 4A-4B.

Two units; first semester.

108A. Orchestration

Theory and practice of arranging music for instrumental combination. Prerequisite: 4A-4B.

One-half unit; either semester.

MUSICAL ORGANIZATIONS

11A-11B or 111A-111B. Treble Clef (Women's) Glee Club

11C-11D or 111C-111D. (Second Year)

Membership based on competitive try-outs.

One-half unit; either semester.

12A-12B or 112A-112B. Men's Glee Club

12C-12D or 112C-112D. (Second year)

Membership based on competitive try-outs.

One-half unit; either semester.

13A-13B or 113A-113B. Orchestra

13C-13D or 113C-113D. (Second year)

One unit; either semester.

14A-14B or 114A-114B. Band

14C-14D or 114C-114D. (Second year)

One-half unit; either semester.

Applied Music

(Credit for applied music is available only for students majoring in Music. It is subject to special permission and arrangement.)

15A-15B or 115A-115B. Stringed Instruments

15C-15D or 115C-115D. (Second year)

16A-16B or 116A-116B. Wind Instruments

16C-16D or 116C-116D. (Second year)

17A-17B or 117A-117B. Voice

17C-17D or 117C-117D. (Second year)

18A-18B or 118A-118B. Piano (Pipe Organ)

18C-18D or 118C-118D. (Second year)

ORIENTATION

A. Orientation

An orientation course planned to furnish educational and vocational lectures and collateral reading. Required of all freshmen registered in the Arts curricula.

One unit; either semester.

PHYSICAL EDUCATION

(See Health and Physical Education.)

PHYSICS

Preparation for the Major in Physics (lower division). Required: Physics 1C-1D; Chemistry 1A-1B; Mathematics C, 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

Lower Division Courses

General Physics

McINTYRE

Physics, properties of matter, and heat. This course aims at a development of fundamental ideas which underlie the subject of physics, and the application of these ideas to the discussion of practical problems. The work is presented in lectures, demonstrations, problem sets and experimental laboratory work. Two lectures, one demonstration, and one laboratory period each week. Prerequisites: High school physics and trigonometry. Eight units; both semesters.

General Physics

BAIRD

This course is a continuation of Physics 1A-1B for students in the sophomore class. It includes magnetism, electricity, sound and light. Two lectures and one laboratory period each week. Eight units; both semesters.

General Physics

BAIRD

Physics of matter, mechanics, heat, sound, light, electricity and magnetism. This is an engineering course. Lectures, demonstrations and discussions. Prerequisite: Completion of high school mathematics. Eight units; both semesters.

Physical Measurements

BAIRD

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity and magnetism. These exercises are usually taken in conjunction with Physics 1A-2B. Eight units; both semesters. (Not offered in 1929-1930.)

Upper Division Courses

Physics

BAIRD

Study of refraction, color, interference, diffraction, polarization, radiation, and instruments. Eight units; first semester.

Physics B. Electrical Measurements

BAIRD

Directed mainly to the study of potentiometer methods, capacity, inductance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics. Eight units; both semesters.

Modern Physics

BAIRD

Introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity in gases, radiation and the quantum theory. Prerequisite: Eight units in physics. Eight units; second semester.

PHYSIOLOGY

(See Biological Science.)

POLITICAL SCIENCE

Prerequisite for the Major in Political Science (lower division): Political Science 1A-1B or History 4A-4B or Geography 1 and 2. High school graduation presupposed in the following courses.

Lower Division Courses

Comparative Government

LEONARD

Comparative study of typical European governments and the government of the United States. The first semester, England, France, Germany, Italy and the United States. The second semester, the lesser European states and the United States. Deposit, \$2.50. Eight units; both semesters.

Upper Division Courses

Constitution of the United States

LEONARD

This course is planned to meet the requirements of the state law for the certification of teachers. The origins, principles and development of the Constitution. Deposit, \$2.00. Eight units; first semester.

111. Theory of the State

The nature of the state, its organization and activities, and its relations to individuals and to other states. Library deposit, \$2.50.

Three units; first semester.

113. American Political Ideals

Underlying theories and principles of American governmental policy. deposit, \$2.50.

Three units; second semester.

PSYCHOLOGY

Preparation for the Major in Psychology (lower division). Required: Psy 2A and 2B, Zoology 1A-1B or Biology 10A-10B. Recommended: French, Chemistry, Physics.

Lower Division Courses

2A. General Psychology (for Liberal Arts students)

An introductory survey of the entire field of psychology. In the study of adult human behavior, and the factors which condition it, a conservative position is taken, leaving the student as nearly as possible unbiased toward the special problems of psychology.

Three units; first semester.

2A. General Psychology (for Education students)

BELL, JO

An introductory survey of the entire field of psychology. The fundamental facts of human behavior and the facts conditioning it are given with special emphasis upon such problems as original endowment, the learning process, work and individual differences in their relation to education.

Three units; both semesters.

2B. Applied Psychology

A general survey of the results of modern psychology applied to self-interest, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in the fields between scientific, legitimate psychology and the pseudo-psychology popular because of its simplicity and plausibility or because of its mysticism.

Three units; second semester.

2C. Genetic Psychology—Growth and Development of the Child

JOHNSON,

A study of the mental and physical growth and development of the child. Special emphasis is given to norms of structure and function as a basis for interpretation of variations from them. Behavior problems and the growth of personality traits and conditioning factors of physical and mental hygiene are stressed.

Three units; second semester.

Upper Division Courses

145. Social Psychology

JOHNSON

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, the crowd, public opinion, control, etc. Prerequisite: Psychology 2A.

Three units; second semester.

SOCIOLOGY

(See Economics.)

ZOOLOGY

(See Biological Sciences.)

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Bulletin
San Diego State Teachers College
— AND —
Announcement of Courses
1930-1931



June, 1930

CALIFORNIA STATE PRINTING OFFICE
SACRAMENTO, 1930

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The Educational Quarterly

BULLETIN OF THE

State Teachers College of San Diego

Volume Eighteen

JUNE, 1930

No. 2

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

STATE DEPARTMENT OF EDUCATION

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ex officio Director of Education
M. H. COHN-----Deputy Director of Education

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SAN DIEGO, CALIFORNIA*

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California, under the act of August 24, 1912

CALENDAR 1930-1931

SUMMER SESSIONS, 1930.

Term I, six weeks, June 23-August 1.

Term II, four weeks, August 4-26.

FALL SEMESTER, 1930-1931.

September	10,	8.00 a.m., College Aptitude Test.*
September	10,	1.30 p.m., Assembly of New Students.
September	11,	8.00 a.m., Examination in Subject A. (English Composition.)
September	11,	10.30 a.m., Assembly of New Students.
September	11,	1.30 p.m., Fundamentals Test.*
September	12,	8.30-12 a.m. and 1.00-2.00 p.m., Registrat of Old Students.
September	13,	8.30-12 a.m. and 1.00-2.00 p.m., Registration New Students.
September	15,	Class Work Begins.
November	11,	Legal Holiday.
November	27-30,	Thanksgiving Recess.
December	13,	Christmas Recess Begins.
January	5,	Class Work Resumes.
January	19-23,	Final Examinations for Mid-Year Graduates.
January	29,	Mid-Year Examinations Begin.

SPRING SEMESTER, 1931.

February	5-8,	Mid-Year Registration Period.
February	5,	8.00 a.m., College Aptitude Test.*
February	5,	1.30 p.m., Assembly of New Students.
February	6,	8.00 a.m., Examination in Subject A (Eng Composition).
February	6,	10.30 a.m., Fundamentals Test.*
February	6,	8.30-12.00 a.m. and 1.00-2.00 p.m., Registrat of Old Students.
February	7,	8.30-12.00 a.m. and 1.00-2.00 p.m., Registrat of New Students.
February	9,	Class Work Begins.
March 28-April 5,		Easter Recess.
May	1,	Dedication Day.
June	10-16,	Final Examinations.
June	19,	Annual Commencement Exercises.

SUMMER SESSIONS, 1931.

Term I, six weeks, June 29-August 7.

Term II, four weeks, August 10-September 1.

* See page 18.

FACULTY

- EDWARD L. HARDY, LL.D., President** SCHOOL ADMINISTRATION
 B.L., University of Wisconsin; M.A., University of Chicago; LL.D., La Verne College.
 Study of European secondary schools.
 Principal of San Diego High School. (Appointed September, 1910.)
- IRVING E. OUTCALT, M.A. VICE PRESIDENT AND PROFESSOR OF ENGLISH**
 A.B., M.A., Stanford University.
 Student, University of Illinois; graduate study and research work, Stanford University, Travel in Europe.
 Head of Department of English, San Diego High School.
 (Appointed September, 1912.)
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 B.S., Valparaiso University; M.A., University of South Dakota.
 Student, Miami University; graduate student, University of Iowa and University of Southern California.
 Superintendent of city schools; conductor and instructor in teachers institutes; Professor of Education at Southern State Teachers College, Springfield, South Dakota.
 (Appointed September, 1925.)
- ARTHUR G. PETERSON, M.A. DEAN OF LIBERAL ARTS, EX OFFICIO IN GENERAL CHARGE OF LOWER DIVISION STUDIES, AND PROFESSOR OF ECONOMICS**
 A.B., College of the Pacific; M.A., Stanford University.
 Graduate student, University of Southern California.
 Vice Principal of San Diego High School and Director of Junior College.
 (Appointed September, 1921.)
- DA HUGHES COLDWELL DEAN OF WOMEN**
 Student, Hopkins Art School and California Medical College, San Francisco; Columbia University. Special Study in Europe. Licensed Pharmacist, State of California.
 Grade teacher, Alameda, California; Head of Home Economics Department, University of Montana, summer session of 1915.
 (Appointed Head of Home Economics Department September, 1907; Dean of Women June, 1915.)
- CHARLES E. PETERSON, A.B. DEAN OF MEN AND ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR MEN**
 A.B., State Teachers College of San Diego.
 Student, Oregon Agricultural College, University of California, and two years under Robert Krohn.
 Director of Playgrounds, Portland, Oregon; Director of Physical Education, Y. M. C. A.; Physical Education and Recreation work in the United States Army Camp; Director of Physical Education in Junior High School, Berkeley, California. (Appointed July, 1921.)
- JOHN R. ADAMS, M.A. INSTRUCTOR IN ENGLISH**
 A.B., M.A., University of Michigan.
 Instructor in Rhetoric, University of Michigan; Associate in English, University of Washington. (Appointed September, 1928)
- GEORGIA C. AMSDEN ASSISTANT PROFESSOR OF COMMERCE**
 Gregg School, Chicago; special secretarial training in various institutions; University of California summer session and extension division work.
 Teacher in University of California summer school; Traveling Representative and Secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant Editor and Reporter, Daily Press, Ypsilanti, Michigan; Instructor, San Diego High School.
 (Appointed September, 1925.)

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INSTRUCTOR IN PHYSICS
AND MATHEMATICS

B.S., M.S. (Civil Engineering), University of California.
Student, American Bridge Company Night School.
Assistant Engineer with Shell Oil Company at Wilmington, California, and Curacao, Dutch West Indies; Assistant Valuation Engineer, Spreckels Sugar Company, Spreckels, California; Engineer with San Joaquin River Water Storage District, Los Banos, California.
Assistant Hydraulic Engineer, California State Department of Public Works, Divisions of Engineering and Irrigation and Water Rights.
Detailer with American Bridge Company, Gary, Indiana; Designer Bridge Department, Santa Fe Railroad, Chicago.
(Appointed September, 1929)

RUTH G. BAGLEY, A.M.

ASSOCIATE PROFESSOR OF ENGLISH

A.B., University of Michigan; A.M., University of California.
Graduate student, University of Illinois and Columbia University.
Head of Department of English, State Normal School, Oshkosh Wisconsin; Instructor, San Diego Junior College. Travel in Europe.
(Appointed September, 1921)

O. W. BAIRD, M.A.

ASSOCIATE PROFESSOR OF PHYSICS

A.B., University of Wisconsin; M.A., University of California.
Graduate student, University of Minnesota.
Head of Science Department, University of Wisconsin High School and Stadium High School, Tacoma, Washington; Assistant in Physics Department, University of Washington, Seattle.
(Appointed September, 1921)

FRED BEIDLEMAN, B.Mus.

ASSOCIATE PROFESSOR OF MUSIC

B.S., B.Mus., Columbia University.
Teacher of Music, Boys High School, Brooklyn, N. Y.; Instructor Columbia University; Head of Violin Department, University of Illinois; Assistant Professor of Music, University of North Dakota; Professor of Music and Director of the Conservatory, College of Puget Sound, Tacoma, Washington.
(Appointed September, 1922)

GERTRUDE SUMPTION BELL, M.A.

PROFESSOR OF PSYCHOLOGY

A.B., Indiana University; M.A., Stanford University.
Graduate student, Indiana State Normal School; Research Worker Clark University.
Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University.
(Appointed August, 1917)

MARY BENTON

ASSOCIATE PROFESSOR OF ART

Student, Rosemont Dezalet, Lausanne, Switzerland; Chicago Art Institute; New York School of Art; Teachers College, Columbia University; pupil of W. J. Whittemore, miniature painter, and of S. Butterworth, craftsman.
(Appointed July, 1917)

LESLIE P. BROWN, M.A.

ASSOCIATE PROFESSOR OF SPANISH

A.B., Yale University; M.A., Harvard University.
Instructor in French and Spanish, Northwestern University; Harvard University; University of North Carolina; University of Chicago.
(Appointed July, 1922)

M. EUSTACE BROOM, M.A.

ASSISTANT PROFESSOR OF EDUCATION

A.B., M.A., University of Illinois.
Student, University of Chicago; graduate student, University of Southern California.
Assistant in Psychology, University of Illinois; Teacher in Illinois high schools; Superintendent of Schools, Illinois and West Virginia.
Instructor in Education, Extension Division, Concord State Normal School, West Virginia; Teacher, Francis W. Parker School of San Diego; Associate Editor, *The High School Teacher*.
(Appointed February, 1922)

ROY E. CAMERON, Ph.D. ASSISTANT PROFESSOR OF ECONOMICS
A.B., Ph.D., University of California.
Student, Creighton University.
Professor of Economics, University of Omaha; Teaching Fellow in
Economics, University of California. (Appointed September, 1929.)

INNIE B. CLARK, A.B. ASSOCIATE PROFESSOR OF GEOGRAPHY
A.B., University of Wisconsin.
Graduate student, University of Chicago; University of Mexico.
Travel in Mexico and Europe.
Assistant in Geography, University of Wisconsin; Teacher, Oak Park
High School, Illinois; Instructor in summer session, University of Cali-
fornia at Los Angeles. (Appointed September, 1914.)

CATHERINE E. CORBETT, A.M. TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION
B.Ed., Michigan State College; B.S., A.M., Teachers College, Colum-
bia University. Graduate Public School Music Course, Ypsilanti Con-
servatory of Music.
Teacher in Public Schools, Ypsilanti, Michigan; Training Supervisor,
Kent State Normal College, Ohio; Evening High School, San Diego.
(Appointed July, 1921.)

GRANT CRAMER, M.A. ASSISTANT PROFESSOR OF MODERN LANGUAGES
A.B., M.A., New York University.
Student, Columbia Law School; University of Leipzig, Germany.
Twenty years residence, travel, and study in Europe.
Instructor, French and German, Lehigh University, Bethlehem,
Pennsylvania; Associate Professor, Modern Language Department,
Boston University; Captain of Infantry, United States Army, Military
Intelligence Division. (Appointed September, 1928.)

ELEN LOIS DALE, M.A. INSTRUCTOR IN BIOLOGY
A.B., M.A., Stanford University.
Graduate student, Stanford University.
Teaching Assistant in Biology, Reed College; Instructor in Zoology,
Mills College; Assistant and Acting Instructor in Biology, Stanford
University. (Appointed September, 1928.)

VALDO H. FURGASON,* B.A. INSTRUCTOR IN BIOLOGY
B.A., St. Olaf College.
Diploma, St. Olaf School of Music; graduate student, University of
Southern California and Stanford University.
Teaching Fellow, St. Olaf College; Instructor in Music, Roosevelt
Junior High School, San Diego. (Appointed September, 1926.)

MORRIS HUBBARD GROSS, A.B. INSTRUCTOR IN PHYSICAL EDUCATION
A.B., State Teachers College of San Diego.
Teacher, Chula Vista Grammar School; Basket Ball Coach, U. S.
Marines and U. S. Naval Hospital. (Appointed September, 1929.)

DITH C. HAMMACK, B. A. TRAINING SUPERVISOR AND ASSISTANT
PROFESSOR OF EDUCATION
B.A., State Teachers College of San Jose.
Graduate of State Normal School of San Diego; graduate student,
University of California.
Public School Teacher. (Appointed February, 1911.)

ROTHY R. HARVEY, M.A. INSTRUCTOR IN BIOLOGY
A.B., State Teachers College of San Diego; M.A., University of
Southern California.
Graduate student, Scripps Institute for Biological Research, La
Jolla; University of California.
Public School Teacher. (Appointed September, 1924.)

* On leave of absence 1929-1930 and 1930-1931.

- ROBERT D. HARWOOD, Ph.D. ASSISTANT PROFESSOR OF ZOOLOGY
B.A., Pomona College; Ph.D., Cornell University.
Assistant in Biology, Cornell University; Field Entomologist, Natural
Survey of Illinois; Teacher, Kern County Union High School and
Junior College, Bakersfield; Assistant in Entomology, Cornell Univer-
sity; Stream Survey, Conservation Department, New York.
(Appointed September, 1928.)
- WALTER B. HERREID, A.B. INSTRUCTOR IN PHYSICAL EDUCATION
A.B., Washington State College.
Graduate student, University of California and University of South-
ern California.
Freshman Football Coach, Washington State College; Director of
Physical Education, Aberdeen High School, Aberdeen, Washington.
Director of Physical Education, Santa Maria Union High School.
Coach, Huntington Park Union High School.
(Appointment effective September, 1930.)
- MARGUERITE VEASEY JOHNSON, A.M. REGISTRAR AND ASSISTANT
PROFESSOR OF CULTURE
HISTORY
AB., Radcliffe College; A.M., Columbia University.
Teacher of Latin, History and French; Assistant in the Registrar's
Office, Teachers College, Columbia University. (Appointed July, 1927.)
- MYRTLE ELIZABETH JOHNSON, Ph.D. PROFESSOR OF BIOLOGY
B.S., M.S., Ph.D., University of California.
Research Assistant, Scripps Institute for Biological Research, La
Jolla; Instructor, Pasadena High School. (Appointed September, 1921.)
- SYBIL ELIZA JONES, M.L. ASSISTANT PROFESSOR OF ENGLISH
B.L., M.L., University of California.
Director, Junior Players of Pasadena Community Playhouse; Dram-
a Instructor in Chouinard Art School, Los Angeles; Organizing Secretar
and Instructor in Play Writing of Summer Art Colony at Pasaden
Community Playhouse; Drama Organizer and Director of San Dieg
Community Service.
(Appointed September, 1925.)
- GENEVIEVE KELLY, A.M. INSTRUCTOR IN SOCIOLOGY
A.B., University of California; A.M., Columbia University.
Student, Los Angeles Public Library School. Travel in Europe.
Teacher, Corcoran Union High School. Librarian, Northern Arizon
Normal School, Flagstaff; Scripps Foundation for Research in Popula-
tion Problems, Oxford, Ohio.
(Appointed September, 1924.)
- MARJORIE KELLY, A.B. INSTRUCTOR IN ART
A.B., University of California at Los Angeles.
Pupil, in Paris, of Andre Lhote, Painter, and of Mme. Alexand
Exter, Russian Stage Designer.
Instructor in Fine Art, Pasadena Junior High School.
(Appointed September, 1927.)
- GUINIVERE KOTTER, M.A. TRAINING SUPERVISOR AND ASSISTANT
PROFESSOR OF EDUCATION
B.S., Utah Agricultural College; M.A., Stanford University.
Graduate student, Stanford University; University of Californi
Teachers College, Columbia University.
Teacher in Public Schools; Primary Supervisor.
(Appointed July, 1928.)
- CHARLES B. LEONARD, Ph.D. PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California.
Instructor in History, Lowell High School, San Francisco; Teachin
Fellow in History, University of California.
(Appointed September, 1921.)

- LEWIS B. LESLEY, M.A.** ASSOCIATE PROFESSOR OF HISTORY
A.B., Stanford University; M.A., University of California.
Native Sons' Traveling Fellow in Europe from University of California.
Instructor, Principia School, St. Louis, Missouri; Teaching Fellow in History, University of California; Acting Assistant Professor of American History, Pomona College.
(Appointed September, 1924.)
- GEORGE R. LIVINGSTON, M.A.** ASSOCIATE PROFESSOR OF MATHEMATICS
B.S., M.A., University of California.
Instructor, San Diego Junior College; Head of Department of Mathematics, Santa Barbara Junior College.
(Appointed September, 1921.)
- MARY RANKIN MOON, A.B.** INSTRUCTOR IN ART
A.B., University of California.
Student, State Teachers College of San Diego and Colorado Springs Academy of Fine Arts. Travel in Europe.
(Appointed September, 1926.)
- ABRAHAM P. NASATIR, Ph.D.** ASSISTANT PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California.
Native Sons' Traveling Fellow in History in Europe.
Assistant Teaching Fellow in History, University of California; Instructor in History, State University of Iowa.
(Appointed January, 1928.)
- WILLIAM L. NIDA, M.A.** PROFESSOR OF EDUCATION, SUPERVISOR OF PUBLIC SCHOOL PRACTICE TEACHING, AND APPOINTMENT SECRETARY
Ph.B., Ohio State University; M.A., University of Southern California.
Graduate student, University of Chicago.
Principal of Ohio High Schools; Superintendent of Schools in Illinois; Supervisor, Junior High Schools, San Diego.
(Appointed July, 1921.)
- ALTER T. PHILLIPS, M.A.** ASSISTANT PROFESSOR OF SPANISH AND FRENCH
A.B., University of Washington; M.A., Stanford University.
Graduate student, University of California and University of Washington.
Teaching Assistant in Spanish and graduate scholarship in Spanish, Stanford University; Assistant Professor of Modern Languages, Wilamette University.
(Appointed September, 1927.)
- JO FRANCIS PIERCE, Ph.D.** PROFESSOR OF CHEMISTRY
B.S., Grinnell College; M.Sc., Tulane University; Ph.D., Stanford University.
Graduate student, Tulane University; University Fellowship, Stanford University.
Research Assistant and Instructor, University of Idaho; Professor of Chemistry, Washburn College; Instructor, Tulane University; Deutsche Chemische Gesellschaft; Lecturer in Chemistry, Mercy Hospital, San Diego.
(Appointed September, 1923.)
- JOHN M. RAW, A.B.** INSTRUCTOR IN PHYSICAL EDUCATION
A.B., University of Southern California.
Graduate student, University of Southern California; travel in Europe.
(Appointed September, 1923.)
- ABEL M. RICHARDS, A.M.** TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION
B.S., A. M., University of Missouri.
Graduate student, University of Southern California.
Rural, City and High School Teacher; City Superintendent of Schools, Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College.
(Appointed September, 1921.)

DUDLEY H. ROBINSON, B.Sc.

INSTRUCTOR IN CHEMISTRY

B.Sc. in Sugar Engineering, University of Louisiana.
Chemist, University of Louisiana Sugar House; Raceland Sugar
Factory; State Sugar House, Louisiana; Research Chemist, Thornley
and Company; Chief Chemist, Pacific Marine Chemicals, Inc.
(Appointed September, 1928.)

CHARLES R. SCUDDER, A.B.*

ASSOCIATE PROFESSOR OF INDUSTRIAL ARTS

A.B., State Teachers College of San Diego.
Student, University of Illinois and State Normal School, Bellingham
Washington; graduate student, University of Southern California.
Teacher of Industrial Work, East Chicago, Indiana, and Granger
Rapids, Michigan; Director of Industrial Arts, Evanston, Illinois;
Muncie Normal Institute, Muncie, Indiana; State Normal School,
Bellingham, Washington. (Appointed September, 1918)

W. T. SKILLING, M.S.

PROFESSOR OF ASTRONOMY

B.S., M. S., University of California.
Student, State Normal School, Los Angeles; Stanford University.
Teacher, Los Angeles County and City public schools; Assistant
in Physics, University of California. (Appointed September, 1907)

FLORENCE L. SMITH, M.A.

ASSOCIATE PROFESSOR OF ENGLISH

A.B., Northwestern University; M.A., University of Chicago.
Instructor, State Normal School, Oshkosh, Wisconsin.
(Appointed July, 1917)

L. DEBORAH SMITH, A.M.

ASSOCIATE PROFESSOR OF MUSIC

Mus.B., A.B., Oberlin College; A.M., Columbia University.
Head of Department of Music, State Teachers College, Winona, Minn.
nesota. (Appointed September, 1922)

MARIAN PEEK SMOOR, A.M.

TRAINING SUPERVISOR AND ASSISTANT
PROFESSOR OF EDUCATION

A.B., A.M., Stanford University.
Travel in Europe.
Teacher in Public Schools; Assistant in History, Stanford University;
Dean of Women, State Normal School, Cheney, Washington.
Instructor, Francis W. Parker School, San Diego, California.
(Appointed September, 1922)

CHRISTINE SPRINGSTON, B.M.

INSTRUCTOR IN MUSIC

B.A., B. M., University of Redlands.
Graduate student, University of Redlands and University
Southern California; student in piano with A. E. Guerue of St. Louis
and Olga Steeb of Los Angeles. "Diploma of Execution," Conservatoire
American, Fontainebleau, France; Supervisor of Music, Needham
California; Assistant in Piano, Organ and Theory, University
Redlands; Instructor, San Diego High School.
(Appointment effective September, 1928)

HARRY C. STEINMETZ, A.M.

INSTRUCTOR IN EDUCATION

A.B., University of California; A.M., University of Southern California.
Assistant in Journalism, University of the Philippines, Manila.
Assistant in Educational Psychology, University of California; Instructor,
Glendale Union High School and San Mateo Junior College.
(Appointment effective September, 1930)

S. LAVENDER STOVALL, B.S. ASSOCIATE PROFESSOR OF MECHANICAL ENGINEERING

B.S. (Electrical Engineering), University of California.
Student, University of Texas.
Research and design of apparatus, General Electric Company;
Chief Engineer of Mt. Whitney Power and Electric Company; Irrigation
Engineering; Efficiency Engineer, oil fields of California.
(Appointed September, 1928)

* On leave of absence February 1, 1930, to January 31, 1931.

LEVENA SUHL, M.A. ASSISTANT PROFESSOR OF GEOGRAPHY
A.B., M.A., University of California.
Teaching Fellow, University of California; teacher in public schools.
(Appointed September, 1926.)

ESSIE RAND TANNER, B.S. ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN
B.S. and Bachelor's Teaching Diploma, Teachers College, Columbia University.
Graduate, Boston Normal School of Gymnastics. Graduate student, University of California and University of Southern California.
Tutor, Brookline, Massachusetts; Supervisor of Physical Education, San Diego County Rural Schools, 1921-1923. (Appointed July, 1904.)

RANKLIN D. WALKER, B.A. ASSISTANT PROFESSOR OF ENGLISH
B.A., (Hons. Oxon.), University of Oxford.
Student, University of Arizona. Holder of Arizona Rhodes Scholarship to Oxford. Graduate student, University of California.
Instructor in Dramatics, Francis W. Parker School, San Diego, California.
(Appointed September, 1926.)

H. WRIGHT, M. A. ASSOCIATE PROFESSOR OF COMMERCE
B.S., M.A., University of California.
Head of Department of Commerce, Visalia Union High School, Visalia, California.
(Appointed September, 1921.)

ASSOCIATE (PART-TIME) MEMBERS OF THE FACULTY

ELIZABETH MCPIKE BROWN, PH.D. ASSISTANT PROFESSOR OF FRENCH
Ph.B., M.A., Ph.D., University of Chicago.
Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France;
Certificate d'Etudes Françaises, University of Paris.
Assistant in French, University of Chicago; Head of French Department, Rockford College, Rockford Illinois; Instructor in University of California, Extension Division, San Diego, California.

MAN BRYSON, A.M. PROFESSOR OF ANTHROPOLOGY
A.B., A.M., University of Michigan.
Director of San Diego Museum. Journalist. Editor of publications of International Red Cross.

SLIE S. EVERTS, B.L. ASSISTANT PROFESSOR OF COMMERCE
B.L., University of Wisconsin.
C.P.A., California, Wisconsin; Public Accountant in Milwaukee, Wisconsin, and San Diego, California.

ONSTANTINE PANNUNZIO, PH.D. PROFESSOR OF SOCIOLOGY
A.B., A.M., Wesleyan University, Middletown, Connecticut; Ph.D., Brookings Institution, Washington, D.C.
Sometime Fellow in Social Research, New York University. Fellow in Social Economics at the Brookings Graduate School, Washington, D. C.

BERT HUNTER PATERSON ASSISTANT PROFESSOR OF ART
Graduate, Maryland Institute of Art, Baltimore.
Student, New York School of Fine and Applied Art, Johns Hopkins, and New York University.
Assistant in the College of Fine Arts, New York University; Assistant on the Staff of American Federation of Arts, Washington, D. C., and Assistant Director of San Diego Fine Arts Gallery.

REGINALD POLAND, A.M.

PROFESSOR OF ART

A.B., Brown University; A.M., Princeton University; A.M., Harvard University.

Fellowship from Princeton University to American Academy at Rome.

Director of Denver Art Association; Educational Secretary, Detroit Institute of Art; Director of San Diego Fine Arts Gallery.

SPENCER L. ROGERS, A.B.

INSTRUCTOR IN ANTHROPOLOGY

A.B., State Teachers College of San Diego.

WILL J. STANTON, LL.B.

ASSISTANT PROFESSOR OF LAW

LL.B., University of Michigan.

Graduate student, University of Michigan.

Editor legal journal; practicing attorney, Michigan and California.

Instructor, San Diego High School and Junior College.

EDMUND BARKHAM GARNER, A.B.

ASSISTANT IN PHYSICAL
EDUCATION

A.B., State Teachers College of San Diego.

Instructor, Memorial Junior High School, San Diego.

MEDICAL EXAMINERS

FRANCES ALLEN, M.D.

MEDICAL EXAMINER AND ADVISER FOR WOMEN

O. S. HARBAUGH, M.D.

MEDICAL EXAMINER AND ADVISER FOR MEN

THE COLLEGE

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897. It received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the legislature, later approved by the Governor of the state and becoming effective July 28, 1921, the designation of State Teachers College, its legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) were offered, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service. The new three- and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the A.B. degree (major in Education) were established for this institution June 1, 1923.

Since July 1, 1927, the courses formerly carried as "junior college" courses have been offered as lower division courses of the regular four-year curricula. On July 12, 1928, the college was authorized by the State Board of Education to offer presecondary curricula with majors in Chemistry, History, English and Romance languages, and special secondary certification curricula with majors in Physical Education, and Art, of them leading to the A.B. degree. On January 6, 1930, the State Board of Education authorized the following additional majors in the secondary curricula: Art, Biological Science (Zoology now offered), Social Sciences (Economics, Geography and History now offered); the special secondary certification curriculum with a major in music. (See pages 31 and 39 for curricula in Commerce.)

For the certification of teachers, the authorized courses (elementary, junior high school and special secondary) are offered and, requiring four years of work, lead to the A.B. degree with any one or a combination of the following credentials: General Elementary School, General Junior High School, Special Secondary in Art, Special Secondary in Music, Special Secondary in Physical Education.

ENVIRONMENT AND STANDARDS

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than physical must be taken into account by the student choosing a college. In cultural standards in art, music, literature and science, San Diego is a favorable college city because, although it is not large, yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-16, including the buildings themselves,

which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing board controlling the collections, and the Director of the San Diego Museum is a member of the faculty of the college. The Fine Arts Gallery contains excellent exhibitions of paintings. There are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings and pageants.

At La Jolla, within the city limits, the Scripps Institution of Oceanography, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point particularly as the college will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The teacher-training program profits because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary schools, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the college.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills and mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round.

BUILDINGS AND EQUIPMENT

The main college building houses the library, the auditorium, the gymnasium, offices, laboratories, and classrooms. The training school is housed in three separate units.

The building for applied arts was made ready for occupancy in September, 1922, as a result of the remodeling of the old training school.

ilding. A new building for physical education of men was finished
nuary 1, 1923, and new quarters for the physical education of women
the same date.

The institution has facilities and equipment as follows:

A college library of 32,000 volumes.

Laboratories for physics, chemistry, and biological science.

Studios, shops, and laboratories for the courses in fine and industrial
s.

For physical education, a well-equipped gymnasium, lockers and
owers, classrooms, and athletic field, tennis courts, etc.

On January 1, 1931, the college will remove to its new campus and
ldings.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students will be required to meet the health standards
by the department of physical education, and all lower division stu-
ts, unless excused for cause, will be required to take the courses in
sical education, prescribed for freshmen and sophomores. Further-
re, each student will be expected as a matter of efficient student and
munity life to keep himself in the best possible physical condition.
Standards of scholarship are based upon high entrance standards. Fre-
nt ratings of the student are made by his instructors, so that he may
all times know how he stands; but the ability of the student to manage
own educational career and to come reasonably near to his best capa-
ties are factors that will count in his final ratings.

Since standards of character, as developed by and measured by honest
dent work, and as revealed by evidences of the possession of thorough-
ig self-respect and community feeling, particularly as to ideals in the
ortant matters of citizenship and future parenthood, are more impor-
t than all else, every student will have full opportunity to show that
is worthy and that he has the capacity and the will to manifest and
elop character.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of
stration, class attendance, conduct of examinations, etc., college
irs are controlled by standards which are the result of experience or
ch reflect a very definite public opinion and college morale. There
o honor "system," but there is a standard of honor as to honesty in
ge work. Matters of personal conduct are not the subject of rules
regulations, but are affairs of personal and individual responsibility.
blems of conduct and control affecting the student body or student
ups are dealt with as they arise (if they are not already the subject
ustom, or of student-body by-laws) and usually, are settled by student
on.

ORGANIZATION

THE CALENDAR AND REGISTRATION

The college year is divided into the fall and spring semesters of
teen weeks each, followed by a summer session consisting of a first
of six weeks and a second term of four weeks. Students may enter
the beginning of either semester and at the beginning of either sum-
term.

The Summer Session meets the needs of regular students who wish to gain credits toward the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work in the lower division.

Registration of students will be made September 12 and 13 for the fall semester, and February 6 and 7 for the spring semester. A duly certified transcript of the applicant's record must be in the possession of the Registrar on or before the day of the applicant's registration.

ADMISSION TO COLLEGE

I. Freshman Standing.

Every person admitted as a student to this college must be of good moral character, of good health, and of that class of persons, who, at proper age, would be admitted to the public schools of the state without restriction. At entrance, every student must take an examination to determine his physical fitness for the teaching profession.

Graduates of accredited public high schools of California, graduates of other schools of California, and graduates of schools of secondary grade of other states recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study and who are recommended by the principal of the school in which such course of study was completed, may be admitted to undergraduate standing.

Candidates may be admitted by either of two methods:

1. Regular (clear) admission. High school graduates who present twelve recommended units and principals' certificates of recommendation will be granted regular admission. Graduates of three-year senior high schools must present nine recommended units earned in grades ten, eleven, twelve.

2. Provisional admission. High school graduates who present fewer than the prescribed number of recommended units, but who through the principals' estimations and recommendations, present satisfactory evidence of ability to profit by courses in teacher training, who have abilities, interests and talents desirable in teaching, and who pass suitable college aptitude tests, may be admitted as provisional students. At the close of the first semester in residence, a complete reevaluation of the credentials and records of all such students will be made. Students who then be granted clear admission, dropped from the college, or for sufficient reason continued as provisional students.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can meet the requirements of either of the above methods. The entrance examinations of the Board are held in June each year (in California at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made up on a blank form to be obtained from the secretary of the Board upon request.

II. Advanced Standing.

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects or which matriculation credit was given.

Credit is given only for regular college work in institutions uniformly recognized as standard colleges, or colleges maintained primarily for the training of teachers, or professional schools in those fields in which this college grants a special credential.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

II. Special Standing.

Either of the two following types of candidate may be admitted as a special student, provided he is at least 21 years of age. (Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students.)

1. High school graduates who did not make a sufficient number of recommended grades to obtain a principal's recommendation may be admitted as special students in such courses as they seem qualified to undertake. In such cases candidacy for graduation depends upon meeting the scholarship requirement of a C average.

2. A candidate who has not had the opportunity to complete a satisfactory high school course, but who is considered competent to undertake certain courses, may be admitted to special standing. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Such a student may become a candidate for graduation upon removing the high school deficiency.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements. The standing of all students is conditional during the first semester of residence.

REGISTRATION PROCEDURE

REGISTRATION

Registration takes place on two regularly appointed days at the beginning of each semester, one for old students and the other for new ones. Faculty advisers representing every curriculum assist students in the planning of their programs, but students are urged to study the requirements of the curriculum they intend to follow and to decide upon their choice of electives before consulting their advisers. New students should not expect assistance with their programs until registration day.

After their first registration, however, students are given the privilege of planning their programs during the preregistration period in the last part of each semester, when they may hold more lengthy consultations with their advisers than on registration day. Since registration is not complete until all fees and course charges have been paid, students should be careful to provide themselves with sufficient funds on registration day.

TESTS REQUIRED AT REGISTRATION TIME AND LATER

(See Calendar for dates.)

1. An examination for the determination of physical fitness is required of all students at entrance. Appointments are made during registration.

2. All students entering the college are required to take the following tests, mainly for purposes of guidance and assistance: (a) College Aptitude Test. (b) English Composition Test.* (c) Social Relation Test. (d) Speech Test. Exceptions may be made for students who register for six units of work or less, for former graduates of this college and for graduates of approved four-year colleges.

3. The Fundamentals Test in reading, spelling, arithmetic and hand writing is a prerequisite for certain courses in Education (see descriptions of courses in Education). Exceptions may be made for former graduates of this college and for graduates of approved four-year colleges.

LATE REGISTRATION

A new student who registers after the close of the first week of the semester is subject to a limitation of his program. A fee of \$2 must be paid for registration after the regular registration period. After the first week of the semester, the instructor's approval must be secured for each course entered.

CHANGES IN REGISTRATION

Changes in program may be made only with the approval of the student's adviser. The late registration fee of \$2 is required for the addition of one or more courses after the first week of the semester, the student is responsible for the change. In addition, the instructor's approval must be secured for entering a course after the first week.

AUDITORS

Regular auditors must register in the usual way, though this may be done on the first day on which they have classes, without payment of the late fee.

* This is required mainly for classification purposes. The results must be considered by students and advisers in the making of schedules. Students are themselves primarily responsible in the matter of overcoming deficiencies. No student whose use of the English language continues to be notably inaccurate or inadequate should expect to receive a certificate of graduation from the college.

EXPENSES

SEMESTER FEES

istration fee-----	\$1 50
t-time (less than six units) registration fee-----	5 00
e registration fee (penalty)-----	2 00
for additional transcript-----	1 00
cial examination fee-----	2 00
luation of record fee-----	2 00

ther fees are being revised and information concerning them can be
ined by addressing the Registrar.

LIVING EXPENSES

he Dean of Women will furnish, upon request, addresses of homes in
h board and room may be secured, also lists of apartment houses
single rooms which may be patronized by students.

oard and room, two meals per day, may be procured at from \$40 to
per month. Apartments consisting of one room, kitchenette and
, renting at \$18 to \$35 per month, will accommodate one or two
ons. Single rooms with kitchen privileges at from \$10 to \$20 per
th are also available. All those listed are in the vicinity of the
ge.

SELF HELP AND LOAN FUND

limited amount of clerical work in offices and library may be offered
time to time, but ordinarily is not sufficiently remunerative to
ce expenses materially. An employment service for men is con-
ed by the Dean of Liberal Arts. The professional loan fund is
nistered for students in the teacher-training courses, seniors being
le for assistance. The general loan fund is available for short time
s to worthy young men and women who have been in attendance at
college one or more years. A loan fund is also administered by
Associated Women Students, The Kiwanis Club of San Diego, the
Teachers' Association, the Scottish Rite Woman's Club, and the
e Nous Club have set aside funds for student loans.

ADMINISTRATIVE REGULATIONS

OFFICERS FOR CONSULTATION

ncerning the housing and living arrangements of students, rules of
ct, dates and arrangements for all student social affairs, personal
e (women)—The Dean of Women.

ncerning matters of student-body policy, leaves of absence (men),
nal advice (men), etc.—The Dean of Men.

ncerning supervision of practice teaching, conference, etc.—The Dean
lication.

ncerning matriculation program of studies and teaching, credits, etc.
e Registrar and the Board of Student Advisers.

Concerning health and physical condition, school athletics, rowing, —The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc. The supervisors of training.

Concerning student-body affairs.—The executive officers of the student body; The Dean of Liberal Arts; The Dean of Women; Dean of Men.

Concerning appointments to teaching positions.—The Appointments Secretary.

Concerning use of the building.—Superintendent of Buildings.

CLASSIFICATION

Regular students are those students who have complied with requirements of admission and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 35 to 59 units of work are classified as sophomores; those who have completed 60 to 89 units, as juniors, and those who have completed 90 or more units as seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation and three hours of field or laboratory work.

Sixteen units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal semester's program for all students. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points. A course in which a student received a passing grade may be used in satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by the permission of the Scholarship Committee, upon petition. No student under 21 years of age will be allowed to register for less than 12 units without the permission of the Registrar.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus one point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D, otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some definite reason. Ordinarily to change an I to another grade the work must be completed within a year. In case of failure in a course, no grade is given until the course has been repeated.

A student must qualify for a certificate in any curriculum or for a transcript of record with recommendation, in transferring to another collegiate institution, a student must have earned as many grade points as he has attempted units of credit; that is, he must have attained an average of at least a C grade in all work undertaken at the College. On a transcript of record for a student whose scholarship is below a C average, the honor of dismissal shall be qualified by the phrase "except for scholarship."

ELIGIBILITY FOR PRACTICE TEACHING

A student shall be eligible for teaching in the training school whose record, and also his record for the preceding semester, does not show a grade C or lower.

PROBATION AND DISQUALIFICATION

A student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the College to the close of any semester is disqualified for further attendance at the college.

A student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the College to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

A probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the college. Probationary status may be continued until the cumulative point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one year for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

ELIGIBILITY FOR EXTRA-CURRICULAR ACTIVITIES

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any semester is ineligible in the next succeeding semester to represent the college in connection with any athletic, literary, musical, dramatic, social, or other organization.

SPECIAL EXAMINATIONS

Special examinations are classified as (1) matriculation examinations; (2) final examinations taken at other than the regular time; (3) examinations taken for the purpose of removing conditions; (4) examinations for advanced standing.

For every special examination given the student shall pay a fee of two dollars at the business office. The instructor shall give such examination only on the presentation by the student of a receipt showing that the fee has been paid.

EXAMINATIONS AT SPECIAL TIMES

No final examinations shall be given to individual students before the regular final. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements with the instructor to have an incomplete grade reported and must take the deferred final examination not later than the end of the second semester following that in which the incomplete was given. No exceptions shall be made to this rule without the approval of the dean of the department and the instructor concerned.

CONDUCT OF EXAMINATIONS

All final examinations shall be written in Blue Books or other forms which shall be furnished by the college and distributed by the instructor at the beginning of the examination period. No books or papers of any kind shall be brought into the examination room, except by special permission of the instructor.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer on a "change of registration card," which must be filed in the Registrar's Office. An unauthorized withdrawal from a class will result in a mark of failure on the student's record; this applies also in the case of complete withdrawal from college. Withdrawal after the sixth week of a semester except for reasons beyond the student's control is interpreted as a failure in the course.

LEAVE OF ABSENCE

A leave of absence from college for a period not to exceed two years may be obtained for satisfactory reasons from the Dean of Women or the Dean of Men. If the student concerned fails to return to college

ould notify the Registrar's Office. A leave of absence does not relieve the student from making every possible attempt to complete the work of each course to the satisfaction of the instructor. Enforced absence beyond two weeks necessitates obtaining the permission of each instructor to continue in the course; if the student is refused permission to return to one or more classes, he should arrange at the Registrar's Office for withdrawal from these courses.

APPOINTMENT OF SERVICE

The department of recommendations has charge of the placement of graduates, assisting them in securing teaching positions and assisting superintendents and boards of school trustees in finding qualified teachers. Recommendations are based on records which indicate every item in the candidate's equipment and particular care is taken to select for nomination in each case a teacher who can meet the requirements of the position.

STUDENT LIFE

ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, the Associated Students. The following list indicates the major activities.

Art Guild, College Orchestra, Delta Kappa (Chemistry), Engineering Club, Golden Quill, International Relations Club, Kappa Delta Pi (National Education Honor), Men's Glee Club, Pendragon, Psychology Club, Silver Scroll, Spanish Club, Skull and Dagger, Treble Clef Club. Men: Associated Men Students, College Band, College "Y" Club, Delta Phi Beta, Epsilon Eta, Eta Omega Delta, Kappa Phi Sigma, Omega Xi, Phi Lambda Xi, Sigma Lambda, Tau Delta Chi.

Women: Associated Women Students, College Y. W. C. A., Women's Athletic Association, Delta Chi Phi, Gamma Phi Zeta, Komo, Phi Kappa Gamma, Phi Sigma Nu, Pro Re Nata, S. A. B. E. Club, Shen Yo, Sigma Theta, Tau Zeta Rho.

Men's Athletics: Football, baseball, basket ball, track, swimming, and tennis.

Women's Athletics: Basket ball, rowing, swimming, and tennis.

Publications: The Aztec (weekly), Del Sudoeste (year book), and Elquenque (quarterly).

ALUMNI ASSOCIATION

The college has an active alumni association. Since its reorganization in March, 1929, the Association has steadily gained in membership. The annual Homecoming is held during the Commencement season; other meetings take place on dates of important athletic contests.

DEGREE REQUIREMENTS

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

The electives must be so chosen that, with the required work, the student will have a total of 6 units of credit in English, 12 units in social science and 12 units in natural science. Courses in journalism or in speech arts are not accepted as satisfying the English requirements. The electives in natural science may be reduced to a minimum of 6 units if the student presents acceptable grades from the high school in natural science in laboratory courses offered in the third or fourth year. In general, each year's work of high school science will thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work; simply an exemption of the requirements will be permitted.

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under heading Courses of Instruction). Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

The course in American Institutions (Political Science 101), or the substitute courses in Political Science 113 or History 171A-171B, is required of all candidates for the A.B. degree.

The minimums in education required by the State run from 12 to 24 or more units, and may be ascertained at registration.

A minimum of 124 units of college work is required. Not less than 54 of these units must be earned in the junior and senior years. All candidates for the A.B. degree must complete at least 30 units of work at this college. Twenty-four of these residence units must be taken with the rank of senior, at least twelve of which are to be taken in the fall or spring semester.

The number of grade points acquired in this college by the candidate for a degree must be equal to the number of units registered on his permanent record card. (See page 21 for an explanation of scholarship grades and grade points.)

Students who are planning to secure California teaching credentials through graduation from this college are urged to follow the curriculum pattern for the credential or credentials which they wish to earn, throughout the entire four years.

Students are urged to fulfill the requirements for at least two credentials, as for example, the General Junior High School and Elementary credentials, the Special credential in Art, Music, or Physical Education and the General Junior High School credential; it is also desirable to secure a General Elementary School credential. In such cases, the curriculum for each credential sought must be completed in full. This will facilitate placement upon graduation, especially for inexperienced teachers.

An academic teaching major consists of 24 units in a field other than education, twelve of which must be in the upper division. An academic teaching minor consists of 12 units in a field other than education, six of which must be in the upper division. Academic teaching majors and minors may be established in the following fields: English, foreign languages, mathematics, natural sciences, physical education, and social sciences (economics, geography, history, political science, sociology). A student who plans to do graduate work in the field of his academic teaching major is advised so to arrange his electives as to complete the presecondary major to avoid the necessity of making up an undergraduate deficiency.

Specific requirements for presecondary majors in art, chemistry, commerce, economics, English, foreign language, geography, history, and psychology may be found in the section giving the presecondary degree curricula and also immediately preceding the course descriptions in those subjects.

Students who take the A.B. degree with only a special credential and who contemplate doing graduate work for a master's degree at another institution of higher learning in an academic field, are advised to use electives to lay a foundation for that work.

CURRICULA LEADING TO TEACHING CREDENTIALS

A.B. Degree With General Elementary School Credential

FRESHMAN YEAR

First Semester—

	Units of Cr	
Biology 10A, ¹ General (unless taken in high school)-----	3	
Social Ethics -----	0	
Geography 1 or 1A, Elements (Natural Science)-----	3	or 2
Physical Education 1A or 52A-----	$\frac{1}{2}$	
Art 6A, Structure-----	2	

Second Semester—

Biology 10B, ¹ General (unless taken in high school)-----	3	
Geography 2 or 2A, Regions (Social Science)-----	3	or 2
Physical Education 1B or 52B-----	$\frac{1}{2}$	
Education XIX, Art in the Elementary School-----	2	

Either Semester—

Social Economics 10, Introduction to Social Science-----	3	
Electives, ² including two minors ³ (for the year)-----	12	or 4
	32	

SOPHOMORE YEAR

First Semester—

Psychology 1A, General-----	3	
Music 1A, Sight-singing and Ear-training-----	2	
Physical Education 1C or 52, Play Activities (women)--	$\frac{1}{2}$	

Second Semester—

Education XVII, Music in the Elementary School-----	2	
Physical Education 53, Administration of Phys. Educ.-----	2	
Physical Education 1D or 52D-----	$\frac{1}{2}$	

Either Semester—

Education I, Introductory Principles of-----	3	
Art 61A, Elementary Crafts-----	2	
Art 61B, Elementary Crafts-----	2	
Electives, including two minors ⁴ (for the year)-----	15	
	32	

¹ Possible substitutions for the requirement in Biology 10A-10B.
1. Botany 2A-2B and Zoology 1A-1B—16 units.

2. High school Botany plus Zoology 1A-1B.

3. High school Zoology plus Botany 2A-2B.

² See first paragraph of Degree Requirements.

³ Unless minor is English, Natural Science or Social Science.

⁴ If 6 units in minor taken in Freshman year, none needed in Sophomore year.

JUNIOR YEAR

First Semester—	Units of Credit
Education CXXVA, Curricular Activities—Lower Levels__	3
Education CXXVI, Children's Literature-----	2
Education CXXIX, Mathematics in the Elementary School	2
Psychology 102C, Genetic-----	3

Second Semester—

Education CXVI, Practice Teaching-----	3
Education CXXVB, Curricular Activities—Upper Levels__	3

Third Semester—

Education CVIII, Educational Measurements-----	3
Physical Education 151, Health Education-----	2
Political Science 101 (or substitute)-----	2
Electives, including two minors (for the year)-----	7
	30

SENIOR YEAR

First Semester—

Education CXVI, Practice Teaching-----	6
--	---

Second Semester—

Education CVI, Philosophy-----	3
Electives, including two minors ⁵ (for the year)-----	21 or 18
	30

⁵ If 6 units in minor taken in Junior year, none needed in Senior year.

A.B. Degree With General Junior High School Credential

FRESHMAN YEAR

First Semester—	Units of Credit
Biology 10A, ¹ General (unless taken in high school)-----	3
Social Ethics -----	0
Geography 1 or 1A, Elements (Natural Science)-----	3 or 2
Physical Education 1A or 52A-----	$\frac{1}{2}$

Second Semester—	
Biology 10B, ¹ General (unless taken in high school)-----	3
Geography 2 or 2A, Regions (Social Science)-----	3 or 2
Physical Education 1B or 52B-----	$\frac{1}{2}$

Either Semester—	
Social Economics 10, Introduction to Social Science-----	3
Electives, ² including major and minor ³ (for the year)-----	16 or 18
	32

SOPHOMORE YEAR

First Semester—	
Psychology 1A, General-----	3
Physical Education 1C (men) 52, Play Activities (women)-----	$\frac{1}{2}$

Second Semester—	
Physical Education 1D or 52D-----	$\frac{1}{2}$

Either Semester—	
Education I, Introductory Principles-----	3
Electives, ³ including major and minor ⁴ (for the year)-----	25
	32

JUNIOR YEAR

First Semester—	
Education CXXVB, Curricular Activities—Upper Levels--	3
Political Science 101, American Institutions (or substitute)	2
Psychology 102C, Genetic-----	3
Education CVIII, Educational Measurements-----	3

Second Semester—	
Education CXVI, Practice Teaching-----	3

¹ Possible substitutions for the requirement in Biology 10A-10B:

1. Botany 2A-2B and Zoology 1A-1B—16 units.
2. High school Botany plus Zoology 1A-1B.
3. High school Zoology plus Botany 2A-2B.

² See first paragraph of Degree Requirements.

³ Unless major or minor is English, Natural Science or Social Science.

⁴ If 6 units in minor taken in Freshman year, none needed in Sophomore year.

Either Semester—		Units of Credit
Curriculum in Field of Academic Major-----	2	
Physical Education 151, Health Education-----	2	
Electives, including major and minor (for the year)-----	12	
		30

SENIOR YEAR

First Semester—	
Education CXVI, Practice Teaching-----	6

Second Semester—	
Education CXXI, Principles of Secondary Education----	2

Either Semester—	
Education, elective -----	2
Electives, including major and minor ⁵ (for the year)-----	19 or 22
	30

⁵ If 6 units in minor taken in Junior year, none needed in Senior year.

A.B. Degree With Special Credential in Art

This course leads to the A.B. degree and to the Special Credential in Art which entitles the holder to teach art in the senior high school, junior high school, and elementary school.

LOWER DIVISION

	Units
Art 6A-6B, Structure-----	4
Art 61A-61B, Elementary Crafts-----	4
Education I, Introductory Principles-----	3
Education XIX, Art in the Elementary School-----	2
Physical Education 1A-1B, 1C-1D (Men); 52A-52B, 52C-52D (Women) -----	2
Psychology 1A, General-----	3
Social Economics 10, Introduction to Social Science-----	3
Social Ethics (First semester, freshman year)-----	0
Electives, including additional Art for major†-----	43
	64

UPPER DIVISION

Education CXVI, Practice Teaching (4 units in special field)----	9
Education CXIX, Art in the Junior High School-----	2
Education CXXI, Principles of Secondary Education-----	2
Education CXXVB, Curricular Activities—Upper Levels-----	3
Education, elective (suggested: Education CVI or CVIII or CXXX) -----	3
Political Science 101, American Institutions (or substitute)----	2
Electives, including additional courses in Art-----	39
	60

† See first paragraph of Degree Requirements.

SUMMARY

	Units
major-----	50
education-----	24
lish-----	6
ural Science-----	12
sical Education-----	2
tical Science 101, American Institutions-----	2
hology-----	3
al Science (including Soc. Econ. 10 and Pol. Science 101)-----	12
tives-----	15
	124

Students who wish to secure the General Junior High School Credential may arrange their electives to satisfy the requirements of that pattern. They may choose Social Science or Natural Science as an academic teaching subject. Complete requirements may be found on page 28.

A. B. Degree With Special Credential in Commercial Education

April, 1930, after the material for this Bulletin had been prepared, the State Board of Education authorized the granting of the special credential curriculum with a major in Commerce, leading to the A.B. degree. This credential entitles the holder to teach Accounting or Secretarial Training subjects in the senior high school, junior high school, and elementary school.

The lower division requirements are the same as those for the preparatory curriculum in Commerce, listed on page 39, except that Soc. Sci. 10 is to be substituted for Orientation; Hygiene 1 or 2 may be substituted; no Foreign Language is required, and Geog. 1 may be used in satisfying the Natural Science requirement.

The upper division requirements include Econ. 18A-18B, 121, 140; Educ. Psych. 102C, Educ. CXVI, CLX, CXXI, Methods in Commercial Subjects; Geog. 141, Pol. Sci. 101, Psych. 2A, special subject requirements in Accounting or Secretarial Training and one-half year, or 1000 hours, of approved experience in the field named on the credential.

A.B. Degree With Special Credential in Music

This course leads to the A.B. degree with a Special Credential in Music entitling the holder to teach music in the senior high school, junior high school, and the elementary school.

LOWER DIVISION

Applied Music*-----
Education I, Introductory Principles (Sophomore year)-----
Education XVII, Music in the Elementary School-----
Music 1A-1B, 1C-1D, Sight Singing and Ear Training-----
Music 2A-2B, Appreciation and History-----
Music 4A-4B, Elementary Harmony-----
Physical Education 1A-1B, 1C-1D (Men); 52A-52B, 52C-52D
(Women)-----
Psychology 1A, General (Sophomore year)-----
Social Economics 10, Introduction to Social Science-----
Social Ethics (First semester, freshman year)-----
Vocal Ensemble and Choral Music-----
Electives†-----

UPPER DIVISION

Applied Music*-----
Education CVI, Philosophy-----
Education CXVI, Practice Teaching (at least 4 in Music)-----
Education CXXI, Principles of Secondary Education-----
Education CXXVII, Music in the Secondary School-----
Education, elective-----
Music 103A-103B, Appreciation and History-----
Music 105A-105B, Advanced Harmony-----
Music 107A, Conducting-----
Music 108A, Instrumentation-----
Political Science 101, American Institutions (or substitute)-----
Vocal Ensemble and Choral Music-----
Electives-----

* Applied Music to be distributed as follows:

Orchestral instrument(s)-----

Piano, 2 years-----

Voice, 2 years-----

(Applied Music credits, $1\frac{1}{2}$ units per semester, for not less than one hour per week, with six hours practice per week, totaling at least ten hours of instruction and one hundred hours practice per semester. Applied Music taken under outside private teachers, subject to the approval and supervision of the music department of the college, which determines credit grades by examination.

† See first paragraph of Degree Requirements.

SUMMARY

Education	24
English	6
Basic major	50
Natural Science	12
Physical Education	2
Political Science 101, American Institutions	2
Psychology	3
Social Science, including Social Econ. 10 and Pol. Sci. 101 as above	12
Electives	15

124

By choosing Natural Science or Social Science as the minor, the General Junior High School Credential may also be earned with this degree. Complete requirements may be found on page 28.

A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in the senior high school, junior high school, and elementary school.

MEN

LOWER DIVISION

	Units
Anthropology 50A-50B, General (sophomore year)-----	6
Biology 10A-10B, General (unless taken in high school)----	6
or	
Zoology 1A-1B, General-----	8
Education I, Introductory Principles (sophomore year)-----	3
Hygiene 1, Personal and Civic-----	1
Music 2A, History and Appreciation-----	2
or	
Speech Arts 1A, Elements of Public Speaking-----	3
Physical Education:	
1A-1B, 1C-1D-----	2
6A, Tennis-----	$\frac{1}{2}$
54, Administration-----	2
Psychology 1A, General (sophomore year)-----	3
Red Cross Swimming Test-----	$\frac{1}{2}$
Social Economics 10, Introduction to Social Science-----	3
Social Ethics (first semester, freshman year)-----	0
Electives† -----	32-35
	64

UPPER DIVISION

Education CXVI, Practice Teaching-----	9
Education CXXI, Principles of Secondary Education-----	2
Education CXXVB, Curricular Activities—Upper Levels----	3
Education, elective-----	7
Physical Education:	
101, Emergencies-----	1
151, Health Education-----	2
155, Applied Anatomy-----	2
CLVIA-CLVIB, Sports Methods-----	4
CLXIIA-CLXIIB, Gymnastic Activities-----	4
163, Aquatics -----	$1\frac{1}{2}$
165, Self Defense-----	$1\frac{1}{2}$
CLXVI, Technique of Officiating-----	1
171, Community Recreation-----	2
CLXXII, Principles-----	2
CLXXIV, Tests and Measurements-----	2
Sports and Athletics-----	1

† See first paragraph of Degree Requirements.

MEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions (or substitute) --	2
Psychology 102C, Genetic (first semester, junior year) -----	3
Zoology 100, Embryology -----	3
Psychology 114A, Genetics -----	2
Psychology 121, Entomology -----	3
Electives -----	16-12
	64
SUMMARY	
Education -----	24
English -----	6
Science -----	1
Speech 2A or Speech Arts 1A -----	2 or 3
Natural Science (including Biol. 10A-10B or substitute and Upper division Zoology) -----	12
Physical Education major -----	30
Political Science 101, American Institutions -----	--
Psychology -----	6
Natural Science (including Soc. Econ. 10, Anthro. 50A-50B and Political Science 101) -----	12
Electives -----	31 or 30
	124

Students are advised to secure the General Junior High School Credential in addition. The requirements may be met at the same time if a double academic teaching major is chosen; the minor subject may be added. For complete requirements, see page 28.

WOMEN

LOWER DIVISION

	Units
Anthropology 50A-50B, General-----	6
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A-1B, General-----	8
Education I, Introductory Principles (sophomore year)-----	3
Hygiene 2, Personal and Civic-----	2
Music 2A, History and Appreciation-----	2
or	
Speech Arts 1A, Elements of Public Speaking-----	3
Physical Education:	
52, Play Activities-----	$1\frac{1}{2}$
52A-52B, 52D-----	$1\frac{1}{2}$
53, Administration-----	2
55, Swimming-----	$\frac{1}{2}$
56, Tennis-----	$\frac{1}{2}$
Psychology 1A, General-----	3
Social Economics 10, Introduction to Social Science-----	3
Social Ethics (first semester, freshmen year)-----	0
Electives†-----	31-33
	64

UPPER DIVISION

Education CVIII, Educational Measurements-----	3
Education CXVI, Practice Teaching-----	9
Education CXXI, Principles of Secondary Education-----	2
Education CXXVA, Curricular Activities—Lower Levels-----	3
Education CXL, Educational Statistics-----	3
or	
Education CVI, Philosophy-----	3
Education, elective-----	2
Physical Education:	
151, Health Education-----	2
155, Applied Anatomy-----	2
CLVIIA-B, Sports Methods-----	4
CLVIII, Stunts and Tumbling-----	1
CLX, Formalized Activities-----	2
161, Folk Dancing-----	2
164, Dancing-----	2
170, Recreational Leadership-----	2
CLXXIII, Principles-----	2
or	
CLXXIV, Tests and Measurements-----	2
CLXXV, Current Problems-----	2
CLXXVII, Individual Program Adaptations-----	2

† See first paragraph of Degree Requirements.

WOMEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions (or substitute)---	2
Psychology 102C, Genetic (first semester, junior year)-----	3
Biology 100, Embryology-----	3
or	
Biology 114A, Genetics-----	2
or	
Biology 121, Entomology-----	3
Electives -----	11-10
	60

SUMMARY

Education -----	24	
English -----	6	
Hygiene -----	2	
Music 2A or Speech Arts 1A-----	2	or 3
Natural Science (including Biol. 10A-10B or substitute and upper division Zoology)-----	12	
Physical Education major-----	28	
Political Science 101, American Institutions-----		
Psychology -----	6	
Social Science (including Soc. Econ. 10, Anthro. 50A-50B and Political Science 101)-----	12	
Electives -----	32	or 31
	124	

Students are advised to secure the General Junior High School Credential in addition. The requirements may be met at the same time if suitable academic teaching major is chosen; the minor subject may be omitted. For complete requirements, see page 28.

Administration and Supervision Credentials

The State Board of Education has authorized this college to make recommendations for the issuance of Administration and Supervision Credentials for holders of Elementary and Junior High School Credentials who have completed the required 15 units beyond the requirements for teaching credential and who have completed two years of successful teaching experience.

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND THE A.B. DEGREE IN THE PRE-SECONDARY CURRICULA

This course leads to the A.B. degree. Completion of the requirements of this curriculum also enables the graduate to satisfy the undergraduate requirements for the General Secondary credential which, with postgraduate work, will enable the holder to teach in a senior high school or junior college. The degree courses are limited to majors in a chemistry, economics, English, geography, history, Romanic languages, zoology, and † commerce.

The junior certificate will be granted on the completion of 64 units of college work and the degree on the completion of 124 units. Certain requirements of the junior certificate may be met by courses taken in the high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree.

LOWER DIVISION

FRESHMAN YEAR	Units Sem. I	Units Sem. II
Social Ethics -----	1	
Orientation -----	$\frac{1}{2}$	
Physical Education -----	1 or 2	
Hygiene -----	3	
English ¹ -----	3-5	
Foreign Language ² or electives -----	3	
Social Science ³ -----	2-5	5
Natural Science ⁴ or electives, ⁵ including preparation for the major -----	16 $\frac{1}{2}$	10

SOPHOMORE YEAR

Physical Education -----	$\frac{1}{2}$	
Foreign Language ² -----	3	
Additional year course ⁶ -----	3	
Social Science ³ -----	3	
Natural Science ⁴ or electives -----	3	
Electives, ⁵ including preparation for the major -----	3	
	15 $\frac{1}{2}$	1

¹ The English requirement may be satisfied either in the freshman year or in the sophomore year.

² At least 15 units in not more than two languages. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

³ To be chosen from the following: Anthropology 50A-50B, Economics 1A-1B, * 11, 18A-18B, * Geography 1-2, * History 4A-4B, * 5A-5B, * 8A-8B, * Political Science 1A-1B, Psychology 1A-1B, Social Economics 50.

⁴ Twelve units required.

A maximum of 6 units of the following high school laboratory courses may be used to meet the natural science requirement when these courses are offered in the third or fourth year of the high school. Each year of high school course will be counted in satisfaction of 3 units of the requirement: Physics, * Chemistry, * Botany, Biology, Physiology, Zoology.

A minimum of 6 units must be chosen from the following: Astronomy 1, 1, Biology 10A-10B,* Botany 2A,* 2B,* 4, Chemistry 1A*-1B,* 6A*-6B,* -8,* Geology 1A, Physics 2A-2B, 3A-3B,* 1A-1B,* 1C-1D,* Zoology 1A,* B,* 100.*

* A total of not more than 12 units of the applied and vocational courses listed below will be counted toward the degree or the junior certificate:

Agriculture 20, 26; Art 61A-61B; Journalism 53A-53B, 153A-153B; Music 1A, 1B, 1C-1D, 19A-19B, 19C-19D, 20A-20B, 20C-20D, 109A-109B, 10A-110B, 119A-119B, 119C-119D, 120A-120B, 120C-120D, 121A-121B, all courses in Applied Music; Physical Education 1A-1B, 1C-1D, 3A-B to 4A-B, 52A-52B, 52C-52D, 52, 53, 54, 55, 56, 151, 155 and all courses with Roman numbers; Secretarial Training A, 1A-1B, 2A, 3A, 5A-5B.

* In addition to the minimum requirement of 15 units in not more than two languages, of 6 units in English, and of year courses in high school elementary algebra and plane geometry, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses.

Latin: Two years of high school courses in Latin or Latin C-D.

Mathematics: 1A and 1B or any combination of 3A, 3B, 6, 8, C.

* At least one of the courses marked with an asterisk must be chosen to meet the social science requirement and the natural science requirement, respectively.

† Presecondary Curriculum with Major in Commerce.

In April, 1930, after the arrangement of this Bulletin had been completed, the State Board of Education authorized the presecondary curriculum with a major in Commerce, leading to the A.B. degree. The lower division requirements conform to the above pattern except that 1) English 1A-1B must be taken to satisfy the English requirement, 2) a total of only 10 units of foreign language (modern) are needed instead of 15 units, and (3) the social science requirement in the freshman year must be elected from Hist. 4A-4B, 8A-8B, or Pol. Sci. 1A-1B. The upper division requirements stated on page 41 must be met in full.

Presecondary major (lower division): Econ. 1A-1B, 11, 14A-14B (6 units); Geol. 1-2, and Mathematics 2.

Presecondary major (upper division): Econ. 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, and 18 units additional chosen in one of the following groups:

A. Accounting: Econ. 160, 161, 162, and 9 units in electives.

B. Banking and Finance: Econ. 131, 133, 134, 135, and 6 units in electives.

C. County and Municipal Administration: Econ. 122, 131, 151, and 3 units electives in Economics; Soc. Econ. 150, 155; Pol. Sci., 6 units. Recommended 6 additional units in Pol. Sci. to complete a minor in Pol. Sci., with Pol. Sci. 1A-1B which should be taken in the lower division; reading knowledge of French or German.

D. Marketing and Merchandising: Econ. 123, 125, 171, and 9 units electives.

Geog. 141 may be used in the electives under A, B, D.

LOWER DIVISION REQUIREMENTS FOR PRE-SECONDARY MAJORS

The student is advised to choose his major as early in his college course as practicable so that he may be able to plan his work according to the major requirements. Failure to meet the lower division requirements of the major department before the junior year may make impossible to satisfy the upper division requirements within the normal period of two years.

Art

Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50A-50B or the accepted equivalents, and four elective units in art.

Chemistry

Chemistry 1A-1B with a grade of C or better. Chemistry 6A-6B, 11-12, Physics 2A-2B or 1A-1B, Mathematics C and 3A-3B or the equivalent, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

Economics

Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 1A, 2B; Geography 1, and 2. Recommended: Social Economics 50; Economics 14A-14B, 18A-18B.

English

English 1A-1B and six units from 56A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

Foreign Languages

Group major: French A-B, C-D and Spanish A-B, C-D.

Geography

Geography 1 or 1A, 2 or 2A, 3 and Geology 1A. Recommended: A reading knowledge of French or German.

History

History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years European history in high school must take History 4A-4B or 5A-5B.

Zoology

Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, 7 and 8, French, German, Botany 2A, 2B, and 5.

* * * * *

Additional lower division majors available for the Junior certificate may be found immediately preceding the course descriptions in the fields of astronomy, journalism, mathematics, physics, political science, psychology and speech arts.

UPPER DIVISION

For requirements in upper division courses, residence requirements, and scholarship requirements for graduation, see regulations under the heading General Requirements for the Degree of Bachelor of Arts.

For restrictions on applied and vocational courses see footnote 5 under upper division requirements.

Political Science 101, American Institutions, or the substitute course Political Science 113 or History 171A-171B, is required of all candidates for the A.B. degree.

Three units in general psychology must be included in the upper division program if not taken in the lower division.

A minimum of 12 units in education is required and a maximum of 18 units will be counted toward the degree. The courses in education must be chosen from the following list:

Ed. I, Introductory Principles (lower division elective); Ed. CXXI, Principles of Secondary Education; Ed. CVI, Philosophy of Education; Ed. CVII, History of Education; Ed. CVIII, Educational Measurements; Ed. CIX, Educational Administration and Supervision; Ed. CXXX, Educational Psychology; Ed. CXL, Elementary Statistics; Psychology 102C, Genetic Psychology.

A minimum of 12 units in a minor subject is required, at least 6 units of which shall be in upper division courses completed in the junior and senior years. Minors are available in the following subjects: art, chemistry, economics, English, foreign language, geography, history, mathematics, music, physical education, physics, political science, psychology, sociology.

The major requirements of one of the following fields must be completed:

Art

Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-B, 150A-B, 152A, 195, and eight upper division elective units in art.

It is recommended that students in meeting degree requirements and choosing free electives, select from the following courses: English 4A-B, 117; French A-B, History 4A-B, 111A-B; Speech Arts 55A-B, 112B.

Chemistry

Units in excess of fourteen are counted as upper division units when taken in the junior or senior year. The minimum requirement for the major must include Chemistry 7-8, 101-102 and 123-124. The organization of the course for the major student must follow a definite plan approved by the department. The related minor must also be approved by the department.

Economics

Required: Economics 100 and 140, with 9 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, and 171. Elective: 3 upper division units in general and applied economics; 6 additional upper division units in any combination of general and applied economics, social economics, and economic geography.

English

Thirty-six units in English, of which not more than six may be in journalism and public speaking and not more than nine in composition. At least fifteen units in upper division courses must be completed in the junior and senior years.

Foreign Languages

Group major: Eighteen upper division units in one language or two units in one language and six units in the other.

The group major requirements are based on the assumption that student will have taken courses in the high school, equivalent to college course in elementary French or Spanish. A student who obtains matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for the third semester of the college course.

Geography

Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

History

Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199, in connection with which he must write a paper, the subject matter to be arranged in consultation with the instructor.

Zoology

(1) At least a C average in upper division major courses. (2) Two or four units of upper division courses in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, physiology and physiology.

Lower Division Arrangements and the Junior Certificate

The State Board of Education has authorized fields in which majors and minors may be given in the California Teachers Colleges as follows: Agriculture, Art, Biological Science, Education, Commercial Education, English, Foreign Languages, Home Economics, Industrial Arts, Education, Mathematics, Music, Physical Education, Physical Science, Philosophy, Psychology, Social Science.

Since the professional training of teachers requires the maintenance of the standard lower division courses in the field of letters and sciences, certain courses are available for students of this college who wish to make adaptations of their lower division curricula to correspond to the typical lower division pre-professional curricula. The completion of a curriculum will give junior standing upon transfer to a college offering upper division work in the appropriate field. Such available adaptations of freshman and sophomore courses offered by this college are: Pre-legal, medical, pre-dental, social service, commerce, engineering, pre-agriculture, accountancy, secretarial training.

COURSES OF INSTRUCTION

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks.

Courses numbered from 1 to 99 and I to XCIX are lower divisions (freshman or sophomore) courses; those numbered 100 and above or C and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. First semester freshmen who have an average grade of not less than 2.0 grade points and second semester sophomores who have an average grade of not less than 1.5 grade points may enroll in an upper division course provided they were registered in at least twelve units in the preceding semester. It is understood that ordinarily the instructor will be consulted by sophomores wishing to take upper division courses. In such cases a course will count as lower division credit.

AGRICULTURE

Nature Study.

SKILLING

A course to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades). May be credited as natural science only for students majoring in Education.

Fall and Spring (2).

Home Floriculture.

SKILLING

A study of ornamental gardening to familiarize students with material used in gardening and methods of propagation. A part of the work consists in lath house practice and visits to nurseries, greenhouses and florists. The course is especially designed to furnish a part of the equipment needed by those intending to teach nature study and general science. May not be credited toward the requirement in natural science.

Fall and Spring (2).

ANTHROPOLOGY

Anthropology 50A-50B. Man's Evolutionary History. BRYSON, ROGERS

Prehistoric evidences of man. Classification of races. Primitive society. Prerequisite: Sophomore standing.

Year course (3-3).

ART

Preparation for the presecondary major (lower division), required also for the Junior certificate: Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-B, 50A-B or the accepted equivalents, and four elective units in art.

Presecondary major (upper division): Not less than twenty-four units upper division art. These shall include Art 112A, 115A-B, 150A-B, 112A, 195, and eight upper division elective units in art.

It is recommended that students in meeting degree requirements and choosing free electives, select from the following courses: English A-B, 106A-B, 117; French A-B; History 4A-B, 111A-B; Speech Arts A-B, 155A-B.

LOWER DIVISION COURSES

Art Appreciation and History

5. Fundamentals. MOC

An illustrated lecture course intended to increase appreciation and give a basic understanding of the elements and principles of art expressed in the architecture, painting, sculpture, and crafts of the past and present.

Fall and spring (2).

50A. Appreciation and History. MOC

A survey of the development of painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance, by means of illustrated lectures and discussion.

Fall (2).

50B. Appreciation and History. POLAND, PATTERSON, MOC

The period from the Renaissance through the Modern School, treated in the same manner as in Art 50A.

Spring (2).

Design.

6A. Structure. MOON, KELLY, BENT

Fundamentals of design and composition and theory of color. Basic course used as a prerequisite for all advanced art work.

Fall and spring (2).

6B. Structure (continued). MOON, KELLY, BENT

Original work in creative design with special stress on modern tendencies. Prerequisite: Art 6A.

Fall and spring (2).

11A. Industrial Design. KE

Problems in creating original designs for decorative and useful articles: jewelry, lamps, and objects that may be made in various materials by hand or machine process. Prerequisite: Art 6A-B.

Fall (2).

11B. Applied Design. KE

Designing and completion of actual objects by the students. This involves such processes as carving, painting, dyeing, block printing, and the like. Prerequisites: Art 6A-B, 11A.

Spring (2).

14A. Lettering. KE

A study of fundamental art principles applied to lettering. Practical for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.

Fall (2).

14B. Posters and Commercial Art. KE

The application of lettering to posters, newspaper, and magazine advertising and other forms of commercial art. The study of composition combined with lettering and special study of modern tendencies in publicity. Prerequisites: Art 6A, 14A.

Spring (3).

A. Stage Design.

BENTON

Theory of line, color, and lighting in relation to the stage. Original designs and costumes developed on a miniature stage. Study of the development of the modern art of the theater. Upper division credit will be given in this course to students of junior standing upon the completion of a theme work and additional original problems. Prerequisite: Art 6A.

Year course (3).

Costume Design.

MOON, KELLY

Original problems in designing modern costumes. A study of line, color, texture, type, and suitability to the wearer and to the occasion; design and historic influence on dress. Prerequisite: Art 6A.

Year course (3).

Drawing and Painting

B. Freehand Drawing.

KELLY

Semester I: Problems involving perspective are given to develop ability, drawing of still life, furniture, exteriors, interiors and the like.

Semester II: Outdoor sketching of landscape and figure, and studio work from still life and costume pose. Emphasis on composition and technique in the handling of various mediums, pencil, pen and ink, charcoal, and water color.

Year course (2-2).

Art 15B. Painting.

KELLY

Semester I: The representation of still life, flowers, and figure poses in water color and oils.

Semester II: Landscape and figure painting emphasized. Prerequisite: Art A-B.

Year course (2-2).

Crafts

Art 61B. Elementary Crafts.

MOON, BENTON

Practical problems in the handling of materials through such problems as clay modeling and pottery, paper making, book binding, weaving, embroidery, and elementary woodworking, involving such projects as puppet construction, toys, etc.

Year course (2-2).

UPPER DIVISION COURSES

Art Appreciation and History

Art 150B. Art Research.

POLAND, PATTERSON

Critical and analytical study for advanced students, involving lectures, original research and discussion at the Fine Arts Gallery. Prerequisite: Art 50B.

Year course (2-2).

Design

Art Composition.

KELLY

Black and white, imaginative composition of natural forms in black and white color. Prerequisites: Art A-B, 6A-6B, 15A.

Year course (2).

112B. Illustration.

KELL

Composition fulfilling the requirements of book illustration from poetry, imaginative tales, and legends, in black and white and color.

Prerequisite: Art 112A.

Spring (2).

152A. Stage Design.

BENTON

See Art 52.

152B. Stage Costume.

KELL

Costume studied in relation to drama. Original designs for mood and character. Practical problems in designing and decorating costumes and accessories for college productions. A brief history of costume from the Egyptian to the modern time. Prerequisites: Art 6A, 52.

Spring (3).

152C. Stagecraft.

JONES

Study of stage terminology and technique. Scene building and decoration. Study of materials and their treatment for stage effects. Experience in setting and lighting college productions. Prerequisite: Art 52 or 152A.

Spring (3).

195. Home Decoration.

BENTON

House planning and landscaping. Interior decoration. Study of period styles and modern decoration. Illustrated lectures and original problems. Prerequisites: Art A, 6A.

Spring (3).

Drawing and Painting

115A. Life Drawing.*

Charcoal and pencil drawing from the nude model. Short poses for memory training and long poses for drawing and technique.

Fall and spring (2).

115B. Life Drawing and Painting.*

Drawing and painting from nude and costume models.

Prerequisite: Art 115A.

Fall and spring (2).

115C. Advanced Painting.*

Painting from nude and costume models. Portraiture.

Prerequisites: Art 115A, Art 115B.

ASTRONOMY

Preparation for the major in Astronomy (lower division) required for the junior certificate: Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-4B, Physics 2A-2B and 3A-3B or 1A-1B and 1C-1D, a reasonable knowledge of French or German.

* These courses can be taken in the night class at the college or at the San Diego Academy of Fine Arts. Special fees will be charged.

Descriptive Astronomy.

SKILLING

cultural course planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature are made. Especial attention is given to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with a six-inch Alvin Clarke telescope is used for observation. Demonstrations are given with a large spectrometer. Also a good selection of lantern slides is used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry. Fall and spring (3).

Historic Development of Astronomy.

SKILLING

A study of the leading facts now known in astronomy in the light of the circumstances attending their discovery. Prerequisite: Astronomy 1. (1).

Modern Astronomy.

SKILLING

Stars and nebulae. A study of modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisites: Astronomy 1 and a knowledge of physics. (1).

BIOLOGICAL SCIENCES

(Biology, Botany, Physiology, Zoology)

General students who wish to take only one or two courses in this department should register for Biology 10A-10B, 10C, 114A or 114B (see 17 for prerequisites for each course).

Preparation for the pre-secondary major in zoology (lower division): Biology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, 7 and 8, French, German, Botany 2A, 2B, 4 and 5. Preparation for the major in Botany (lower division), required for the pre-certificate: Botany 2A, 2B, 4, and Chemistry 1A.

Pre-secondary major in zoology: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in physics, organic chemistry, physics and physiology. (The college now requires two years of work in preparation for the botany major.)

Students preparing to teach science in the junior high school should include in their courses work in zoology, botany, physics, chemistry (at least high school chemistry), and Education CXX. The following are also recommended: geography, geology, anthropology, astronomy, and upper division physical sciences.

Notes: A fee of \$2 is required in all laboratory courses in this department. The fee covers the cost of materials used. For breakage and extra work in addition to the estimated need an extra charge must be made.

BIOLOGY

LOWER DIVISION COURSES

10A-10B. General.

M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in heredity. Laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic facts of biology. It is designed not only to give the general student an acquaintance with living things and their relationships but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and one three-hour laboratory period per week. Designed for those who do not expect to specialize in zoology or botany, but not open for credit to students who have taken Biology 10C, Zoology 1A, or Botany 2A. Students who have taken 10A or 10B may elect Zoology 1A or Botany 2A for credit.

Year course beginning either fall or spring (3-3).

10C. General.

An outline of the main facts and principles of biology and their bearing upon human life. Lectures, demonstrations, and conferences. Designed for students who do not expect to specialize in botany or zoology. Not open for credit to students who have taken Biology 10A-10B, Zoology 1A or Botany 2B, but students who have taken 10C may elect Zoology 1A or Botany 2A for credit. Two lectures and one conference hour per week.

Fall and spring (3). (Not offered in 1930-1931.)

BOTANY

LOWER DIVISION COURSES

2A. General.

HARVEY

A study of the fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.

Fall (4).

2B. General.

HARVEY

A continuation of 2A treating morphology and relationship of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Spring (4).

4. California Plants.

HARVEY

Classification and ecology of representative orders of flowering plants in the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week.

Spring (2).

5. Trees and Chaparral.

HARVEY

Practice in the determination of the important species of the San Diego region. One lecture and three hours laboratory per week, with several Saturday field trips.

(2).

UPPER DIVISION COURSES

2. Plant Geography.

HARVEY

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or Botany 4, or equivalent.
Fall (2).

4. Taxonomy.

HARVEY

Six hours per week of lectures, laboratory, and field work on the identification, classification, and distribution of representative orders of flowering plants. Prerequisite: Botany 2A-2B, 4.
Spring (3).

5. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least three units of lower division work in the department with a grade of A or B.
Fall and spring (1 or 2).

PHYSIOLOGY

1. Physiology of Exercise.

DALE

The study of the mechanism of the human body with special reference to the physiology of the motor system. Lectures, demonstration experiments, class discussions, and reports. Prerequisite: Zoology 1B or Zoology 10B.
Fall (2). (Not offered in 1930-1931.)

ZOOLOGY

LOWER DIVISION COURSES

General.

HARWOOD

An introduction to animal biology dealing with structure, functions and evolution of animal life. Laboratory work supplements the lectures. The course is based on the study and observation of living and preserved material. The course, valuable to the general student as well as to the biology specialist, will acquaint one with the fundamental facts and theories of biology as they pertain to animal life. Two lectures or recitations and two three-hour laboratory periods per week.
Fall (4).

General.

HARWOOD

A continuation of 1A. The structure, relationships, and classification of the chordates. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A.
Spring (4).

UPPER DIVISION COURSES

100. Embryology.

M. E. JOHNSON

The development of vertebrates as illustrated by the frog, chick, and pig. Six hours of laboratory and one hour of lecture per week. Prerequisite: Zoology 1B or Biology 10B.

Given alternate years. (Not offered in 1930-1931.)

Spring (3).

112. Invertebrate.

M. E. JOHNSON

The structure, classification, habits, and life histories of the invertebrates of the region, particularly of the marine fauna. One hour of lecture and six hours of laboratory per week. Prerequisite: Biology 10A-10B or Zoology 1A.

Given alternate years. (Not offered in 1931-1932.)

Fall (3).

114A. Genetics.

DAVID

A study of the laws of inheritance in plants and animals. Two lectures per week.

Fall (2).

114B. Evolution.

DAVID

A study of the development of theories of evolution. Two lectures per week.

Fall (2).

121. Entomology.

HARWOOD

The classification, life-history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and three hours of laboratory per week.

Given alternate years. (Not offered in 1930-1931.)

Spring (3).

113A. Taxonomy and Natural History of the Vertebrates.

HARWOOD

One hour of lecture and six hours of laboratory per week. Frequent field trips and the identification of preserved material. Prerequisite: Zoology 1B or Biology 10B.

Given alternate years.

Fall (3).

113B. Ornithology.

DAVID

The study and identification of birds, especially those of the Pacific coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1A-1B, Biology 10A-10B, or 10C.

Spring (3).

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT

(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least three units of lower division work in the department with a grade of A or B.

Fall and spring (1 or 2).

CHEMISTRY

Preparation for the presecondary major (lower division) required also the Junior certificate: Chemistry 1A-1B, with a grade of C or better. Chemistry 6A-6B, Chemistry 11-12, Physics 2A-2B or 1A-1B, Mathematics C and 3A-3B or their equivalent, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B.

Presecondary major (upper division): All units in excess of fourteen counted as upper division units when taken in the junior or senior year. The minimum requirement for the major must include Chemistry 101-102 and 123-124. The organization of the course for the major student must follow a definite plan approved by the department. The student minor must also be approved by the department.

LOWER DIVISION COURSES

1B. General Chemistry.

PIERCE, ROBINSON

The general principles, laws of chemical combination, and a description of the elements and their important compounds. Two lectures, one quiz and two laboratory sessions per week. The second semester laboratory includes qualitative analysis throughout. Prerequisites: High school chemistry and high school physics and trigonometry. Second year course (5-5).

1A. Qualitative Analysis.

PIERCE

Study of qualitative separations and theories as applied not only to solutions but to ores, slags, alloys, and solid salts. One hour lecture and quiz, three laboratory periods. Prerequisite: Chemistry 1A-1B. Second year course (4).

6B. Introductory Quantitative Analysis.

PIERCE, ROBINSON

Determinations by gravimetric, volumetric, and electro-analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B. Second year course (3-3).

Organic Chemistry.

ROBINSON

Study of the carbon compounds (aliphatic and aromatic) and their derivatives, including the synthesis of different compounds and the proof of their constitution. A general consideration of the subject and the principles involved. Two lectures or quiz and one laboratory period, first semester; one lecture or quiz and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B. Second year course (3-3).

2. Mathematics of Chemical Calculation.

ROBINSON

Applied mathematics for chemical calculation, including the calculus applied to physico-chemical problems. Not counted as upper division credit. Second year course (3-2).

UPPER DIVISION COURSES

101-102. Advanced Inorganic Chemistry.

PIER

The laws and theories of elementary work from the viewpoint physical chemistry. The laboratory work covers such typical items gas laws, mol weights, laws of combination, ionization, equilibria (homogeneous, heterogeneous and complex) and electrochemistry. Two lectures two laboratory periods per week. Prerequisites: Chemistry 1A-16A-6B, 7-8, 11-12.

Year course (4-4).

110. Industrial Chemistry.

ROBINS

A course of lectures on the application of chemistry to the arts. The most important industries are embraced and principles of evaporation, distillation, sublimation, filtration, crystallization, calcination, refrigeration, use of fuels and water purification are discussed. Prerequisite: Chemistry 6B-8.

Spring (3).

123-124. Organic Preparations.

PIER

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. A reading knowledge of German required. Laboratory and conferences. Prerequisite: Chemistry 7. Hours to be arranged.

Year course (2 to 5-2 to 5).

125. History of Chemistry.

PIER

Development from time of Geber on reading, report, and seminar basis. Considers both experimental advances and production of the experiment by the Ostwalds, Remsen, Emil Fisher, and Victor Meyer. Prerequisite: Chemistry 101-102.

Fall and spring (2).

130. Teaching of Chemistry.

PIER

Laboratory planning, fitting, optional fields of development beyond basic matter are covered. Relative methods of presentation and a consideration of various texts and manuals are considered. Prerequisite: Chemistry 101-102.

Spring (2).

200. Research.

THE ST

Special investigational work on such problems as equipment and library will permit. Open to students of senior standing only. Prerequisites: Chemistry 102, 124.

Fall and spring (2 to 5).

ECONOMICS

Preparation for the presecondary major in Economics (lower division required also for the Junior certificate: Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 1A, 2B; Geography 1 and 2. Recommended: Social Economics 50; Economics 14A-14B, 18A-18B.

Presecondary major (upper division) required: Economics 100 and 101, with 9 units selected from the following: Economics 121, 123, 127, 128, 133, 134, 135, and 171. Elective: Three upper division units in general and applied economics; 6 additional upper division units in any combination of general and applied economics, social economics, and economic geography.

LOWER DIVISION COURSES

-1B. Principles of Economics.

CAMERON, A. G. PETERSON

The basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wages, profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and finance; transportation corporations, labor problems, socialism, taxation.

The aim of the course is (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and (3) to introduce future citizens to political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading.

Not open to entering freshmen except by special arrangement. Year course (3-3).

Economic History of the United States.

WRIGHT

A comprehensive survey of American economic development and of national legislation in the field of industry. Year course (3).

-14B. Accounting.

WRIGHT

Knowledge of bookkeeping not required and not advantageous. A study of the balance sheet; profit and loss statement; various types of methods of original entry; the opening, conducting and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions and consolidations; branch store accounting, etc., keeping in view the modern accounting practice. Eight hours lecture and laboratory. Year course (3 or 4-3 or 4).

-18B. Commercial Law.

STANTON

The leading and fundamental principles of business law. Simple cases illustrating the actual application of the principles to commercial and business transactions, rather than the development of those principles. The subjects covered: contracts, sales, agency, partnerships, corporations, property, negotiable instruments, insurance and wills, with a brief review of evidence.

Year course (3-3).

UPPER DIVISION COURSES

Modern Economic Thought.

A. G. PETERSON

A study of classical doctrine in the light of recent economic theory. Critical analysis of contemporary economic thought. Prerequisite: Economics 1A-1B.

Year course (3).

121. Business Administration.

A. G. PETERS

A study of the problems of business administration as an interrelated whole and as an indication of lines of study which may lead to the solution of those problems. A discussion of the problems of the business administrator with particular reference to the character of the problems involved and to the control policies and devices of the management. Questions, problems, and case studies. Prerequisite: Economics 1A-1B.
Fall (3).

123. Marketing.

CAMERON

A study of our distributive organization and its functions, including the marketing of both agricultural and manufactured products. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1930-1931.)

125. Advertising and Salesmanship.

Principles and problems.

(4)

127. Urban Land Economics.

CAMERON

The development of urban economy, location and structure of cities, urban land utilization, city planning and zoning, taxation, housing, urban land credit and land valuation, with special emphasis upon local conditions. Spring (3). (Not offered in 1930-1931.)

131. Public Finance.

CAMERON

Principles and practice of taxation, public expenditures, and financial administration. Prerequisite: Economics 1A-1B.
Spring (3).

133. Corporation Finance.

CAMERON

A study of the corporate form of organization, instruments of long-term finance, methods of raising capital, efficient financial management, and financing of reorganizations. Prerequisite: Economics 1A-1B.
Fall (3).

134. Investments.

CAMERON

Investment analysis and a study of the investment of personal savings. Spring (3).

135. Money and Banking.

CAMERON

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A-1B.

Fall (3). (Not offered in 1930-1931.)

140. Statistical Methods.

BROOKS

An introductory study of the statistical measures and devices most commonly used in connection with work in the field of economics. Opportunity given to obtain practice in the use of calculating machines and other devices to computation. Prerequisite: Two years of high school algebra.
(3)

1. Personnel Administration.

A. G. PETERSON

Principles of scientific management, labor turnover, selection and placement of personnel, discipline and discharge, methods of wage payment, health and safety, labor participation in management.
Spring (3).

2. Advanced Accounting.

WRIGHT, EVERTS

An intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, instruct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory.
Fall (3).

3. Cost Accounting.

WRIGHT, EVERTS

Principles and methods of cost accounting in the mercantile establishment and in the factory. A study of bookkeeping procedure, the forms used, and their application to practical problems.
Spring (3). (Not offered in 1930-1931.)

4. Accounting Systems.

WRIGHT, EVERTS

The accounting systems used in various types of business and financial concerns. Some practice in devising and installing systems.
Spring (3).

5. Transportation.

CAMERON

The development of railway transportation; railroad financing; rates and rate making; government regulation; government operation of railroads during the war; recent development of motor and air transportation; current problems. Prerequisite: Economics 1A-1B.
Fall (3).

Economic Geography

(See Geography)

Social Economics

LOWER DIVISION COURSES

Social Ethics.

COLDWELL

Required of all entering students. A course aimed to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society—of men to society. One hour per week for 9 weeks.
Fall and spring. No credit.

Orientation.

A. G. PETERSON

An orientation course planned to furnish educational and vocational guidance. Lectures and collateral reading. Required of all freshmen who are candidates for the Junior certificate or the degree in the pre-secondary curricula.
Fall and spring (1).

2A. Home Making.

COLDWELL

A general view of the place of the home in society, administration of the household, budgeting of incomes to cover shelter, food, clothing, savings and social life.

Field work, assigned reference reading, and theme writing required. Lectures, class discussions, recitations.

Fall and spring (2).

10. Introduction to Social Science.

PANUNZIO, A. G. PETERSON

A study of man's descent, race, social organization, ideals of conduct, and civilization. Modern problems.

Fall and spring (3).

50. General Sociology.

KELLY

A study of the nature and organization of human group activity, including the relation of cultural heritage to public opinion and social change. Previous preparation in biology and psychology is recommended.

Fall and spring (3).

UPPER DIVISION COURSES

150. Science of Society.

PANUNZIO

An advanced study of social environment, basic sociological concepts and principles, social institutions and organizations, social origins, social progress, social control, and social values. Open to students who have taken Economics 1A-1B or Social Economics 50 and to other properly qualified juniors and seniors by special arrangement. Texts, directed reading, lectures, reports on research.

Fall (3).

151. Social Problems.

PANUNZIO

Progress, social change, and social adjustment; with a detailed study of the problems of population, the family, social problems of economic life and of problems of socialization. Prerequisite: Social Economics 50 or equivalent or Economics 1A-1B. Upper division students who have not met the above prerequisite may be admitted by special permission of instructor.

Spring (3). (Not offered in 1930-1931.)

185. Introduction to Social Investigation.

PANUNZIO

Theory and practice of social science research. Selection of a social or economic topic for investigation by each student, on which he conducts researches, makes frequent reports of progress, and has opportunity to cooperate with the Sociological Laboratory of Neighborhood House. Open by permission of the instructor to such juniors and seniors as have shown in Social Economics 150 an interest in some specific field and a capacity to undertake research.

Spring (3).

Social Psychology

(See Psychology)

Secretarial Training

Business Mathematics.

WRIGHT

A practical course in the mathematics of business. The ability to add, subtract, and divide rapidly and accurately is developed. A thorough study also made of interest, compound interest, discount, amortization tables, insurance rates, etc.
Fall. No credit.

1B. Typewriting.

AMSDEN

A rapid development of a thorough command of a keyboard by the shorthand method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms, tabulation of bills; specifications, legal forms, and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit given for this course except in the curricula in accountancy and secretarial training. Five hours lecture and laboratory practice.
Year course (4-4).

Typewriting.

AMSDEN

A short course designed for those not wishing to enter the business office desiring a knowledge of the use of the typewriter. Five hours laboratory practice.
Fall (2).

Office Methods and Appliances.

WRIGHT

Practice and principles of office management, including organization, management, and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and book-binding machines. Trips made to local establishments to study at first hand actual business conditions. Prerequisite: Secretarial Training 1A is equivalent.
Spring (3).

1B. Stenography.

AMSDEN

An intensive course designed for the practical preparation of office secretaries. A thorough study of the Gregg System. Development of the ability to read and write shorthand rapidly and correctly, both literary and commercial. The shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit given for this course except in the curricula in accountancy and secretarial training.
Year course (5-5).

Stenography.

AMSDEN

Development of speed in writing and transcription. Advanced dictation of letter forms, legal forms, speeches, and literary material.
Spring (3).

EDUCATION

LOWER DIVISION COURSES

1. Education—Introductory Principles.

BROO

An orientation course in professional education. A preliminary survey covering briefly the historical and philosophical background of the modern public school and culminating in a consideration of modern education practice, with special reference to public and quasi public organizations which more or less directly participate in the program of education.

Fall and spring (3).

XVII. Music in the Elementary School.

L. D. SMIT

Main objectives of music teaching in the public elementary school. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing, and part singing. Conducting. Prerequisite: Music 1A.

Fall and spring (2).

XIX. Art in the Elementary School.

BENT

A practical application of the elements and principles of art to problems for grades 1-6. Presented through lectures, reports, demonstrations, lessons and laboratory work. Prerequisite: Art 6A or its equivalent.

Fall and spring (2).

UPPER DIVISION COURSES

CVI. Philosophy of Education.

BROO

A study of the fundamental biological, psychological, and philosophical social principles underlying modern education, in connection with the demands of modern society in a complex social, economic and scientific world, with a view to the formulation of a working philosophy for the educative process. Designed as a culmination of the studies of education and its procedures. Open only to students with senior standing.

Spring (3).

CVII. History of Education.

A. T.

A brief study of early Hebrew, Greek, Roman and early Christian Education; of the changes brought about by the Renaissance; of the transition to modern secular education; brief reviews of the educational philosophies of the great reformers; a concluding study of the development of the American school system and of American ideals and practices in education.

Fall (3).

CVIII. Educational Measurements.

STEINME

A brief survey of the history of scientific measurement in the elementary field; a study of the nature of intelligence tests, especially of the practical uses of group intelligence tests; the practical use of achievement tests. Simple statistical training in handling data through practical problems. Open only to students who have passed the Fundamentals test.

Fall and spring (3).

X. Educational Administration and Supervision.

HARDY

A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc. Prerequisites: Education (XV-B, CVIII or equivalents).

Spring (2).

C. Educational Organization and Supervision.

BROOM

A study of types of supervision and methods of evaluating and improving teaching. Prerequisites: Education CXXV-B, CVIII or equivalents.

(2)

C.I. English in the Junior High School.

BAGLEY

Objectives of literature and language teaching in the junior high school; criteria for selection of material; technique of classroom procedure; observation in the city schools. Prerequisite: The satisfaction of the lower division requirements in English for the teaching major in English.

(2)

C.II. Mathematics in the Junior High School.

RICHARDS

The subject matter, management of it and methods of teaching it in a junior high school curriculum in general mathematics. Specific problems: application of arithmetic in current social and business life, intuitive geometry, graphic representation, the phase of algebra suitable to the junior high school pupil, preparation for senior high school mathematics. Prerequisites: Psychology 1A and a passing grade in the Fundamentals of Mathematics.

(2)

C.IV. Social Science in the Junior High School.

NIDA

This course for prospective junior high school teachers attempts to meet the problem of the teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography and civics. Methods of securing direct experience and training through field work, school and other survey and study projects, and of developing a genuine and continuing interest in social and civic problems through observation and reading, will be discussed and illustrated. Prerequisites: Four units of geography and six units of history.

Fall (2).

C.VI. Practice Teaching.

AULT AND SUPERVISORS

Systematic observation, participation and actual teaching under competent supervision in the Training School and in the city schools of San Diego. The general plan for a student who has not had teaching experience is to take one period of practice teaching daily for a semester and alternate periods daily for another. In some cases the second assignment is for a half day. Only in case of an extreme emergency will a student who has not had experience in teaching be permitted to satisfy all practice teaching requirements in a single semester. It is planned to distribute the practice teaching assignments so that the student will have

some experience in both upper and lower grades, with the emphasis on the grade or grades in which the student is particularly interested. Deviation from this plan is very liable to result in unsatisfactory training and is tolerated only when unavoidable.

One period of teaching daily for a semester is usually credited with two or three units and two periods with four to six units, depending upon the character of the assignment and the work. When more time is needed the student is assigned to additional practice.

The practice teaching requirements of a minimum of eight units and maximum of twelve units are usually reduced for those who have had successful teaching experience. The usual requirement for inexperienced teachers is nine units. Practice teaching credit is usually reduced four units by the universities. Students planning to transfer to such institutions should be prepared to meet this reduction with an equivalent amount of acceptable units in other subjects.

Prerequisites: Passing grade in Fundamentals Test; C average in college work and in work of the preceding semester; three units of credit in Psychology and six units of credit in Education. No credit will be given for this course unless registration is made in the office of the Dean of Education.

CXVIII. Class Management.

CORBETT

A discussion of the problems arising in connection with schoolroom discipline; methods of securing a wholesome school "spirit" and the application of civic principles to school life.

(2)

CXIX. Art in the Junior High School.

BENTLEY

Art curriculum planning for junior high schools and studio problems and discussion. Prerequisite: Education XIX and preparation for teaching major in Art.

Spring (2).

CXX. A-B. Science in the Junior High School.

Courses in the content, methods, field work, textbooks, laboratory work, equipment, and reference reading for Junior High School Science. Prerequisite: 18 units of college science.

CXX-A. Biology.

JOHNSON

Prerequisite: Eighteen units of college science including Biology 10A-10B or Zoology 1A-1B and Botany 2A-2B.

Fall (2).

CXX-B. Physical Sciences.

SKILLMAN

Prerequisite: Eighteen units of college science including Physics 2A-2B or equivalent and high school or college chemistry.

Spring (2).

CXXI. Principles of Secondary Education.

NASH

The principles of educational science that should underlie the organization, administration and curriculum of the secondary school. Prevailing patterns of high school education; tendencies in the direction of future development. Particular attention to the problem of individual

ences and to that of articulation of the secondary school with the
ver and higher schools. Prerequisites: Psychology 1A and Education
or equivalents.
Fall and Spring (2).

CXIV. Romance Languages in the Junior High School. BROWN

A consideration of the main questions of pronunciation, grammar,
composition, reading, texts, etc., as applied to teaching elementary classes
in French and Spanish; the different methods; their history and value.
Prerequisite: Two years of college French or Spanish.

(2)

CXV-A. Curricular Activities—Lower Levels. HAMMACK

Units of work; characteristics of children in the primary grades;
organization of the activity program, activities and materials based on
children's interests and need through the local environment; teaching
and learning procedures for acquiring basic abilities, reading, language,
writing, use of numbers; observation and participation in actual class-
room situations. No credit for those who have had Education CXXVIII.
Candidates for the Elementary Credential are required to take both
Education CXXV-A and CXXV-B, preferably in the order listed. If can-
didates for both the elementary and junior high school credentials prefer
to take both Education CXXV-A and CXXV-B, they should consult
their advisers concerning their choice. Prerequisites: Psychology 1A
and a passing grade in the Fundamentals Test.

Fall and spring (3).

CXV-B. Curricular Activities—Upper Levels. SMOOR

Units of work; characteristics of children in middle and upper grades;
organization of the program in terms of children's interests and capac-
ities; techniques of developing abilities in reading, use of numbers and
language expression; investigations of methods and materials of the
social studies; observation of typical teaching procedures. No credit for
those who have had Education CIV. See note under Education CXXV-A
concerning these two courses. Prerequisites: Psychology 1A and a
passing grade in the Fundamentals Test.

Fall and spring (3).

CXVI. Children's Literature. CORBETT

A study of the principles of selection underlying the choice of litera-
ture for the elementary school, with special emphasis on the social and
educational status of the child. A study of source material and its
classification. A critical examination and evaluation of new literary
materials for children's use and a discussion of the best illustrators of
books for children. Practice in developing technique in story telling
through practical work in Story Hours.

Fall and spring (2).

CXVII. Music in the Secondary School. L. D. SMITH

Main objectives of music teaching in the public secondary schools.
Organization of the chorus and glee clubs, voice testing, seating, a
survey of song materials available. Organization of courses in applied
music, harmony, history and appreciation. Prerequisite: Education
I.

Fall (2).

CXXIX. Mathematics in the Elementary School.

RICHARD

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics together with study and observation of the newer methods as used under ordinary classroom conditions. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and spring (2).

CXXX. Educational Psychology.

BROO

A study of the learning process, including such topics as laws and types of learning, curves of learning and of forgetting, economy of learning, amount, rate and limits of improvement, spread of improvement, transfer and experimental studies in learning. Prerequisite: Psychology 1A.

Spring (3).

CXL. Elementary Statistics.

BROO

An introductory study of the statistical measures and devices most commonly used in connection with educational work. Data taken from typical school conditions. Opportunity given to obtain practice in the use of calculating machines and other aids to computation.

Fall (3).

CXLV. Organization and Administration of Music Education.

L. D. SMITH

Theory of the general principles of music administration; correlation of music with the various subjects in the public schools; music test, creative work. Prerequisites: Education XVII and CXXVII.

Spring (2).

CLX. Vocational Education.

SCUDDER, WRIGHT

Aims and objectives of vocational education of less than college grade. Spring (3).

CLXI. Junior Business Training.

WRIGHT

The methods and content of the course in the elements of business training as offered in the junior high school.

Fall (2).

CLXIII. Secretarial Training.

AMSTER

Methods and content of courses in stenography, typing and office procedure.

Fall (2).

CLXIV. Bookkeeping.

WRIGHT

A study of various types of bookkeeping method with considerable study of content.

Fall (2).

ENGLISH

Preparation for the pre-secondary major (lower division), required also the Junior certificate: English 1A-1B and six units from 56A-56B, 57A-57B. Recommended: A reading knowledge of German or French. Pre-secondary major in English—Required: Thirty-six units in English, of which not more than six may be in journalism and public speaking and more than nine in composition. At least fifteen units in upper division courses must be completed in the junior and senior years.

LOWER DIVISION COURSES

1B. Composition. ADAMS, BAGLEY, F. L. SMITH, WALKER
A. A course in writing directed to a mastery of technical correctness and a training in the organization of material. 1B. Practice in effective writing based on extensive reading of modern literature. A classification test in Subject A must be taken before admission. Year course, beginning fall and spring (3-3).

4B. Great Books. OUTCALT
A survey of books and bodies of literature that are significant sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic and Tragedy, Norse Eddas, and other literature of religious and communal character; and highly significant masterpieces in poetry and prose by great authors down to the nineteenth century. Year course (3-3).

52B. Types of Literature. OUTCALT
Semester I: Introduction to the study of lyrical and narrative poetry; elements and elements of poetry; typical poems. Semester II: Introduction to the study of dramatic poetry and prose, the essay, novel and short story; elements, principles and characteristics; examples. Year course (3-3).

56B. Survey of English Literature. BAGLEY, ADAMS
A study of the most important masterpieces of English literature from the Anglo-Saxon period to the Victorian age. Year course (3-3).

Periodical Literature. WALKER
A study of current literature, in content and form, as presented by magazines and periodicals, with the purpose of promoting intelligence and discrimination in reading with immediate interest. Discussions and written assignments dealing with contemporary essays, fiction and poetry. Year course, beginning fall and spring (3).

UPPER DIVISION COURSES

Modern Prose Fiction. OUTCALT
A study of recent and contemporary fiction in drama, novel, and short story, beginning with Meredith and including the best British and American of today. Year course (3).

106A-106B. Advanced Composition.

F. L. SM

A laboratory course in modern prose writing. First semester, artistic narrative, with description. Second semester, the essay, the magazine article, criticism, the newspaper syndicate article. Outside reading. Prerequisite: One year of college composition.

Year course (3-3). (Either semester may be taken first.)

117. Shakespeare.

OUTC

Extensive reading of Shakespeare's plays, with special attention to a select group of the comedies and another of the tragedies. Lectures and special reports.

Fall (3).

118. Makers of Eighteenth Century Literature.

BAG

A study of Pope, Swift, Johnson, Goldsmith, Fielding, Burns, and their contemporaries as interpreters and teachers of their age.

Spring (3).

119. The Romantic Poets.

AD

A study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

Fall (3).

121. Browning and His Contemporaries.

WAI

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

Spring (3).

130A-130B. American Literature.

OUTC

Semester I: A survey of American literature and its backgrounds from 1607 to the Civil War. Semester II: Recent American literature, with backgrounds from the Civil War to the present time, giving special attention to the development of prose fiction in the novel, short story and drama.

Year course (3-3). (Not offered in 1930-1931.)

151. Medieval Literature.

BA

A study of the literature of the fourteenth century, especially the romances, *Piers Plowman*, and the poetry of Chaucer.

Fall (3).

160. Milton and Dryden.

AI

Studies in the poetry of the seventeenth century, relating it to the thought and the social life of the age.

Spring (3).

JOURNALISM

(See page 74.)

Speech Arts

(See page 87.)

FOREIGN LANGUAGES

Preparation for the major in a foreign language (lower division), required for the Junior certificate: Sixteen units of credit in the language chosen for the major. Recommended: History 4A-4B.

Preparation for the pre-secondary group major in Romanic languages (lower division): French A-B, C-D, and Spanish A-B, C-D.

Pre-secondary group major (upper division): Eighteen upper division units in one language or twelve units in one language and six units in the other.

The group major requirements are based on the assumption that the student will have taken courses in the high school equivalent to the college course in elementary French or Spanish. A student who offers matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for the third semester of the college course.

French

LOWER DIVISION COURSES

3. Elementary.

CRAMER, PHILLIPS

Intensive study of French grammar and syntax; daily written work discussed in class; class drill in conversational idiom and pronunciation; dealing with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of French prosody, with literary work. Credit not given for French A unless followed by French D. Students who have had one year of French in high school should register for French A, but will receive only two units of credit. Those who have had two years of French in high school should register for French B; in which case they will receive four units of credit. Prerequisite: French A. Year course (5-5).

4. Intermediate.

L. P. BROWN

Reading and composition; study of standard prose as a basis for class discussion; collateral reading with résumés and written reports in French; study of French prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences. Prerequisite: French B or three years of high school French, or its equivalent. Students who have had four years of high school French, or its equivalent, should register for French D. Year course (3-3).

Scientific.

CRAMER

Readings taken from the fields of chemistry, physics, medicine, zoology, botany, etc. Outside readings of books and periodicals. Oral and written reports. Year course (2).

UPPER DIVISION COURSES

-101B. Conversation and Composition.

E. M. BROWN

Prerequisite: French D, or its equivalent, with grade of C. Year course (3-3). (Not offered in 1930-1931.)

102A-102B. Introduction to French Classics.

E. M. BROWN

A study of selected works of Corneille, Racine, Moliere, and other writers of the seventeenth century. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1930-1931.)

105A-105B. Modern French Drama.

E. M. BROWN

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, Hervey, Maeterlinck, Rostand, and others will be read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3).

109A-109B. Survey of French Literature.

E. M. BROWN

A course intended to give a broad foundation for further study in French literature. The chief movements and writers from the sixteenth through the nineteenth centuries are studied, with selected readings. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1930-1931.)

German

LOWER DIVISION COURSES

A-B. Elementary.

CRAVE

Pronunciation, reading and grammar, with practice in simple conversation, narration, and description, both oral and written. Credit not given for German A unless followed by German B. Students who have had one year of German in high school should register for German A but will receive only two units of credit. Those who have had two years of German in high school should register for German B; in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

CRAVE

Reading and composition; study of standard prose as basis for class work; collateral reading with written reports; German conversation with the texts read as a basis; dictation. Prerequisite: German B or three years high school German, or its equivalent. Students with credit for four years high school German, or its equivalent, should enter French D.

Year course (3-3).

SC-SD. Scientific.

CRAVE

Fall semester. Readings in scientific reader on chemistry, physics, etc. occasional written reports on scientific subjects read outside of class sight reading. Spring semester. Readings in special scientific or technical works; weekly written reports required; sight reading. Prerequisite: German SC-German B with a grade of C or three years of high school German; German SD-German C with a grade of C or four years of high school German.

Year course (2-2).

Latin

Ciceronian Prose.

M. V. JOHNSON

Reading in Latin and discussion of several of Cicero's orations; consideration of rhetorical devices and historical setting. Review of Latin syntax. Attention to comprehension of the meaning in the Latin order. Not open to students with credit for Cicero in high school. Prerequisite: two years of high school Latin.

Fall (3).

Augustan Poetry.

M. V. JOHNSON

Reading in Latin of portions of Vergil's *Æneid*, with special attention to literary qualities, metrical form, and the relation of this poem to its time and to other epics. Artistic translation emphasized. Selections from Ovid possibly included. Not open to students with credit for Vergil in high school. Prerequisite: Latin C, or three years of high school Latin.

Spring (3).

Spanish

LOWER DIVISION COURSES

A. Elementary.

L. P. BROWN, PHILLIPS

Intensive study of Spanish grammar and syntax, with daily written work; class drill in conversational idiom and pronunciation; reading and oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of Spanish prosody, with literary work. Credit not given for Spanish A unless followed by Spanish B. Students who have had one year of Spanish in high school should register for Spanish A, but will receive only two units of credit. Those who have had two years of Spanish in high school should register for Spanish B; in which case they will receive four units of credit. Two-year course, beginning either fall or spring (5-5).

B. Intermediate.

PHILLIPS

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in English; a study of Spanish prosody, with selections for memorizing; dictation. Class work conducted mainly in Spanish. Individual conferences. Prerequisite: Spanish B or three years of high school Spanish, or its equivalent. Students with credit for four years of high school Spanish, or its equivalent, should enter Spanish D. Two-year course (3-3).

UPPER DIVISION COURSES

A-101B. Conversation and Composition.

L. P. BROWN

Prerequisite: Spanish D, or its equivalent, with grade of C. Two-year course (3-3). (Not offered in 1930-1931.)

A-102B. Introduction to Spanish Classics.

L. P. BROWN

Reading from several types of classical literature. *Gil Blas*, and other novels of Roguery; one drama each from the works of Lope de Vega, Cervantes, Alarcon, and Moreto; selections from *Don Quixote*, and the *Mejores Poesias Castellanas*; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor. Two-year course (3-3).

105A-105B. Modern Spanish Drama.

L. P. BROWN

The development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3.) (Not offered in 1930-1931.)

110A-110B. Novel and Short Story in Spain.

L. P. BROWN

The development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3.) (Not offered in 1930-1931.)

General Language

A. Latin and Greek Word Derivation.

L. P. BROWN

A general and elementary course in philology. Latin and Greek roots of most frequent occurrence in English. Interrelations and development of meaning of the different words in English derived from the given roots. Open to all students except first semester freshmen.

Spring (2).

GEOGRAPHY

Preparation for the presecondary major in Geography (lower division) required also for the junior certificate: Geography 1 or 1A, 2 or 2A, and Geology 1A. Recommended: A reading knowledge of French or German.

Presecondary major (upper division): Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

LOWER DIVISION COURSES

1, 1A. Introduction to Geography; Elements.

CLARK, SUH

The fundamental principles of geography, the distribution of life upon the earth and the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and location are related to human activities. Open to all students.

Geography 1, fall and spring (3).

Geography 1A, fall and spring (2).

2, 2A. Introduction; Natural Regions and the Distribution of Population and of Cultures.

CLARK, SUH

The application of the fundamental principles of geography to the various regions of the world. Regions are compared with regard to different stages of development. Prerequisite: Geography 1 or 1A.

Geography 2, fall and spring (3).

Geography 2A, fall and spring (2).

3. Elementary Meteorology.

BLAIR

An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments and records.

Spring (3).

UPPER DIVISION COURSES

13. Climatology.

BLAKE

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention given to the climate of different parts of the United States. Prerequisite: Geography 3.

Fall (3).

16D. Geography of South America.

CLARK

The climate, topography and natural resources of the South American countries; the effect of those physical factors upon the economic, commercial, and racial problems of the different nations. Prerequisites: Geography 1 or 1A.

Fall (3).

17. Geography of Europe.

CLARK

The physical environment of each of the nations and their reactions to physical environment in their political and social relations. This course planned to so familiarize the student with modern European countries that he can read current periodical literature with understanding and interest. Prerequisite: Geography 1 or 1A.

Spring (3).

21. Geography of North America.

CLARK

A study of the natural regions of North America, their formation and economic and historical development. Prerequisite: Geography 1 or 1A.

Fall (3). (Not offered in 1930-1931.)

24. Geography of Asia.

SUHL

A study of the cultural regions of Asia, their physical environment, and historical development. Prerequisite: Geography 1 or 1A.

Spring (3).

5A. Geography of the San Diego Area.

CLARK, SUHL

Historical, economic, and other regional factors of the geography of San Diego. Independent regional field work required. Prerequisites: Geography 1, 2 and 3 and Geology 1A.

5B. Advanced Field Work.

CLARK, SUHL

Prerequisite: Geography 135A.

Spring (2).

1. Economic Geography.

SUHL

A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 or 1A and 2 or 2A.

Fall (3).

Geology

1. General.

SUHL

A study of the surface features of the earth, agencies and processes of change, and evolution of topographic forms.

Fall and spring (3).

GERMAN

(See Foreign Languages.)

HEALTH AND PHYSICAL EDUCATION

(See Physical Education.)

HISTORY

Preparation for the presecondary major in history (lower division) required also for the Junior certificate: History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-5B.

Pre-secondary major (upper division): Twenty-four units in upper division course in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199, in connection with which he will write a paper, the subject matter to be arranged in consultation with the instructor.

LOWER DIVISION COURSES

4A-4B. History of Modern Europe.

LESLE

Development of European society and institutions from about 1500 A. D. to the present time.

Year course (3-3).

5A-5B. History of England.

NASATI

A study of the more important political, constitutional, and cultural phases of English development. The purpose of this course is to convey a good working knowledge of English history and to provide a survey of the part the Anglo-Saxon race has played in world history.

Year course (3-3).

8A-8B. History of the Americas.

NASATI

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis is placed on the process of planting European civilization in the new world, the international contest for the continents, the wars for independence, the development of the American republics, and their relations with each other and with the rest of the world. The course is based on H. E. Bolton's "Syllabus of the History of the Americas."

Year course (3-3).

UPPER DIVISION COURSES

11A-111B. Ancient History.

LESLEY

A study of the social, economic, political and cultural development of the Greek states, with emphasis upon the growth of democracy, attempts at federal union, imperialism, and Hellenism. The second semester covers Roman history from the earliest times to the beginning of the medieval period: discussions of Roman imperialism and the main constitutional, economic, social and religious developments in the republic and the empire.

Year course (3-3). (Not offered in 1930-1931.)

121A-121B. Medieval History.

LESLEY

General survey of European politics and the cultural development of the Middle Ages; the antecedents of the renaissance; development of medieval life and institutions, feudalism, the church, the universities, and intellectual tendencies. The rise of towns, of new nations, and of new thought, especially in the twelfth and thirteenth centuries. This course covers the period 500-1500 A. D.

Year course (3-3).

145A-145B. Europe Since 1789.

LESLEY

Revolutionary era; conflict of reaction and liberalism; development of nationalism, with special attention devoted to the unification of Germany and Italy; events leading up to the World War and contemporary problems of Europe resulting from that conflict.

Year course (3-3).

146A-146B. Diplomatic History of Europe.

LESLEY

European diplomatic and colonial policies since 1648, with detailed attention to the basic factors in international organization and procedure. During the second semester special emphasis is placed upon the period 1700-1930. (Not credited for students with credit for History 151A-151B.)

Year course (3-3). (Not offered in 1930-1931.)

156A-156B. History of British Expansion.

NASATIR

A study of the growth, development, and break-up of the older overseas empire; the beginnings of the newer empire after 1783; the rise, federation, and imperial relations of the self-governing dominions; the crown colony system; India under British rule; and British expansion in Africa and the Pacific.

Year course (3-3). (Not offered in 1930-1931.)

157A-157B. South America Since Independence.

NASATIR

A study of the republics of South America. Attention will be directed to the development of nationality in South America, the struggles for political stability, the exploitation of resources, diplomatic and commercial relations with the United States, and other international problems of South America. Time will be devoted to a survey of present-day conditions, political, economic, and social.

Spring (3).

163. Mexico and the Caribbean Countries.

NASAT

In general this course will follow the plan outlined in History 16. Special attention will be paid to the relations of the United States with these countries, and to the recent developments in Mexico.

Fall (3).

171A-171B. The Rise of the American Nation.

LEONAR

Semester I. English colonization in North America and the development of colonial institutions and politics. Semester II. The revolutionary movement and the Revolutionary War; the establishment of the government under the constitution to about 1820.

Year course (3-3).

173A-173B. The Expansion of the United States.

LEONAR

The rise of Jacksonian Democracy; territorial expansion and the Mexican War; the slavery controversy, the Civil War, and reconstruction; the growth and progress of the United States to the World War.

Year course (3-3). (Not offered in 1930-1931.)

199. Special Course for Advanced Students.

LEONAR

This course is required of all students with a history major in the pre-secondary curriculum, and is to be attended during the senior year. Other students interested in history may be admitted with the permission of the instructor.

Spring (2).

HYGIENE

LOWER DIVISION COURSES

1. Personal and Civic (Men).

C. E. PETERS

An informational course in personal and community hygiene required of all men in the freshman year. A study of sex hygiene and the hygiene principles of exercise, bathing, sleep, etc. Investigations by each student of special topics which serve to vitalize the means for protecting and improving the health of the community. Required of all freshmen who are candidates for the Junior certificate or the degree in the pre-secondary curricula.

Fall and spring (1).

2. Personal and Civic (Women).

TANN

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social hygiene studied in its relations to the practical problems of young women and prospective home makers. The laws and procedures in local civic health matters of particular interest to women are studied in detail. Reports following personal investigation of at least three major topics are required of each member, these reports being given and discussed before the class. Required of all freshmen who are candidates for the Junior certificate or the degree in the presecondary curricula.

Fall and spring (2).

INDUSTRIAL ARTS

Mechanical Drawing.

SCUDDER

Use and care of instruments, lettering, geometrical problems, orthographic projections, revolution, developments, intersections, tracing and e printing. Nine hours per week.
Fall and spring (3).

Descriptive Geometry.

STOVALL

Twenty-one or more plates required and four examinations given. The tes deal with the customary problems of points, lines, planes, perpendiculars, parallels, distances, angles, solids, developments, warped surfaces, rsections, etc. The aim of the course is to create originality, and to elop the ability of the student to visualize and present on paper prob-s which are theoretical or practical. Prerequisite: Mechanical Draw-3A or the high school course in mechanical drawing.
Fall (3).

Machine Drawing and Design.

STOVALL

unction of machines; motion, force, and work in machines; analysis of hanism; velocity, acceleration, and effort diagrams; parallel motions, s; ratchets; toothed wheels; valve gear and design. Three lectures two drafting periods. Prerequisite: Industrial Arts 21.
pring (5).

Materials of Construction.

ANDERSON

tructural properties and adaptability of various materials commonly l in building construction.
pring (2).

Applied Mechanics.

STOVALL

roblems concerning the action of external forces on rigid bodies; com-tion and resolution of forces; equilibrium; rectilinear and curvilinear on; acceleration, linear and angular; harmonic motion; translation rotation; moment of inertia, kinetic and potential energy; work er, friction; machines; efficiency. Prerequisites: Mathematics 3A-3B Physics 1A 1B.
Fall (3).

Elements of Electrical Engineering.

STOVALL

general survey of the field of electrical engineering. Single and poly-e circuits; power-factor, reactance, generators, motors, transformers, transmission of power. Prerequisites: Mathematics 3A-3B and ics 1C.
ring (3).

JOURNALISM

eparation for the major in journalism (lower division) required the junior certificate: History 4A-4B or 8A-8B, Psychology 1A, Secretarial Training 2A, Political Science 1A-1B, Economics 1A-1B, ish 1A-1B, 52A-52B, Journalism 51A-51B. Recommended: Eng-4A-4B, 60, Speech Arts 1A-1B, Social Economics 50, Anthropology 50B, Economics 18A-18B, Music 2A-2B or Art 5.

The aim of the course in journalism is to offer introductory training in the principles and practice of journalistic writing only after a good foundation in correct speaking and writing of English has been laid and to prepare for the necessarily broad field of the profession of journalism by introductory work in as many of the fields of literature, history, political science, social science, economics, the arts, etc., as is possible. Practical training in news reporting and editing for student publications and for the daily press is emphasized.

Journalism 51A-51B. News Gathering and Reporting. F. L. SMITH

Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. Course planned for sophomores who have had English 1A-1B, with high school journalism or equivalents.

Year course (3-3).

Journalism 53A-53B. Applied Journalism. F. L. SMITH

Credit earned for editorial or other staff work throughout a semester on student publications such as *The Aztec*, *El Palenque*, *Sudoeste*.

Fall and spring (1 to 3-1 to 3).

Journalism 100. News Editing. F. L. SMITH

Practice in copyreading, proofreading, headline writing, and newspaper makeup. Prerequisite: Journalism 51A-51B or equivalent.

Spring (3).

Journalism 153A-153B. Advanced Journalism Practice. F. L. SMITH

Upper division work of the same type as that in 53A-53B, but with advanced requirements.

Fall and spring (1 to 3-1 to 3).

NOTE.—Not more than six units in all will be given for journalism practice on student publications.

LATIN

(See Foreign Languages)

MATHEMATICS

Preparation for the major (lower division) required for the junior certificate: Mathematics 3A, 3B, 4A, and 6 or equivalent. Recommended: Physics, astronomy, and a reading knowledge of French or German.

LOWER DIVISION COURSES

C. Plane Trigonometry. LIVINGSTON

Instruction in the use of logarithms, slide rule, and calculator machine. Prerequisites: Elementary algebra and plane geometry.

Fall (3).

1B. Elementary Functions.

LIVINGSTON

theory and use of algebraic, trigonometric, logarithmic, and exponential functions; introductory work in analytic geometry and calculus. Prerequisites: Plane geometry and one and one-half years of high school algebra. Year course (3-3).

Mathematics of Investment.

WRIGHT

interest and annuities; amortization; sinking funds; valuation of bonds; depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Plane trigonometry and two years of high school algebra, or equivalent. Year course (2).

2B. Analytic Geometry and Calculus.

LIVINGSTON

A unified course in analytic geometry and differential calculus, together with an introduction to the integral calculus. The work of the first semester is complete in itself and may be elected by those wishing only an introductory course. Prerequisites: Trigonometry, plane and solid geometry, and two years of algebra in the high school. Students lacking one or two semesters of the high school work, should ordinarily take one or all of 1A-1B, before or concurrently with 3A-3B, according to the judgment of the department. Year course (3-3).

B. Analytic Geometry and Calculus—Higher Course.

STOVALL

Analytic geometry, both plane and solid; calculus, both differential and integral with special emphasis on their practical use in engineering. Prerequisite: Mathematics 3A-3B. Year course (3-3).

Introduction to Projective Geometry.

LIVINGSTON

Construction and study of conic sections by means of perspectives, projections, and polars, and involutions. Prerequisite: Plane trigonometry. Year course (3).

College Algebra.

LIVINGSTON

A rapid review of elementary algebra, followed by logarithms, progressions and series, permutations and combinations, probability, theory of equations. Prerequisites: Plane geometry and one, one and one half or two years of high school algebra. After the first few weeks the class size will be reduced from five to three except for the few who need extra drill and review. Year course (3).

UPPER DIVISION COURSES

Elementary Geometry for Advanced Students.

LIVINGSTON

Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry, projective geometry, and calculus. Year course (3). (Not offered in 1930-1931.)

102. Elementary Algebra for Advanced Students.

LIVING

Selected topics viewed from the standpoint of higher mathematics.
Prerequisites: Introductory courses in analytic geometry and calculus.
Spring (3). (Not offered in 1930-1931.)

104. History of Mathematics.

A non-technical course open to students who have some knowledge of the fundamental ideas of mathematics.
(3). (Not offered in 1930-1931.)

111. Theory of Equations.

LIVING

General solutions of algebraic equations; approximate numerical solutions; applications. Prerequisites: Mathematics 3A-3B.
Fall (3).

112. Analytic Geometry of Space.

LIVING

Planes, lines, and quadric surfaces. Prerequisite: Mathematics 4B.
Spring (3).
N. B.—Upper division credit will be granted for Mathematics 4B taken after the sophomore year.

MUSIC

For course in preparation for Public School Music teaching refer to curriculum in Music Education, page 32.

For information regarding majors and minors in music, and for details not found here, consult the Music Education Adviser.

LOWER DIVISION COURSES

1A. Sight Singing and Ear Training-Fundamentals of Music.

L. D. S.

Elementary music theory; scale construction; drill in music reading both with syllables and with words; ear training, elementary music notation; the elements and materials of music. This is the basic course as prerequisite for all advanced music work and for the courses in music education. Text—Gehrken: Fundamentals of Music.

Fall and spring (2).

1B. Sight Singing and Ear Training.

L. D. S.

Tonal and rhythmic dictation, rhythmic writing, sight singing with Latin syllables and with words. Text—Wedge: Ear training and sight singing. Prerequisite: Music 1A.

Spring (2).

1C-1D. Advanced Sight Singing and Ear Training.

L. D. S.

Tonal and rhythmic dictation, rhythmic writing and sight singing in two, three, and four parts. Text—Wedge: Advanced ear training and sight singing. Prerequisite: Music 1A-1B.

Year course (2-2).

2A-2B. Appreciation and History of Music.

SPRING

How and of what music is made. How to listen to, enjoy, and appreciate it. The development of music from the earliest times, to the present.

ular effort to gain some acquaintance with the music of the various
ls and composers by listening to examples of it. Illustrated with
ous phonograph records. A general fundamental, and nontechnical
e, requiring no previous musical training or background.
ur course (2).

3. Harmony (Elementary).

SPRINGSTON

le construction, intervals, chords, structure, modulation, through
is types of seventh chord. Especial attention is paid to the key-
application of problems in harmonization, transposition, and modu-
Prerequisite: 1A, or the equivalent.
ee units; both semesters.

4-C-D. Instrumental Ensemble.

BEIDLEMAN

practice and performance of string, wind, and brass instruments.
r course (1-1).

4-C-D. Vocal Ensemble and Chorus.

L. D. SMITH

eneral course open to all students but one which may be offered
usic students toward satisfying the requirement in vocal ensemble.
harmony in two, three and four parts; voice quality, phrasing,
retation and enunciation will be considered in detail; study of song
al suitable for junior and senior high school.
or spring ($\frac{1}{2}$).

UPPER DIVISION COURSES

103B. Appreciation and History of Music—Great Music.

SPRINGSTON

ly of the great masterpieces of music in the larger forms, by
of phonograph records and scores. Prerequisites: Music 2A-2B,
4A-4B, or equivalent.
e course (1-1).

105B. Advanced Harmony.

BEIDLEMAN

pletion of harmonic theory—modulation, inharmonic tones, etc. Con-
on of harmonic analysis, and keyboard harmony. Prerequisite:
4A-4B.
e course (2-2).

106B. Applied Harmony.

BEIDLEMAN

h and analysis. Polyphonic treatment of harmony. Introduction to
il composition. Prerequisite: Music 105A-105B.
e course (2-2).

Conducting.

BEIDLEMAN

technique of the baton. Methods and materials for use in directing
and instrumental organizations. Prerequisite: 1A-1B, or 4A-4B.
a (2).

Instrumentation.

BEIDLEMAN

ry and practice of arranging music for instrumental combinations.
quisite: 4A-4B.
and spring (2).

109A-109B. Violin Class Principles.

BEIDLEM

Methods and materials for teaching violin in classes. Prerequisite: least some playing ability on the violin.

Year course (1-1).

110A-110B. Piano Class Principles.

SPRINGST

Materials and methods used in piano classes in the elementary school. Prerequisite: At least two years of piano lessons.

Year course (1-1).

119A-B-C-D. Instrumental Ensemble.

BEIDLEM

(See 19A-B-C-D)

120A-B-C-D. Vocal Ensemble and Chorus.

L. D. SM

(See 20A-B-C-D)

121A-B. Voice Class Principles.

L. D. SM

Class methods in the fundamentals of singing, including breathing, to production, resonance, enunciation and interpretation. Prerequisite: least one year of vocal study.

Fall and spring (1).

MUSICAL ORGANIZATIONS

11A-11B or 111A-111B. Treble Clef (Women's) Glee Club.

L. D. SM

11C-11D or 111C-111D. (Second Year)

Membership based on competitive try-outs.

Year course ($\frac{1}{2}$ - $\frac{1}{2}$).

12A-12B or 112A-112B. Men's Glee Club.

BEIDLEM

12C-12D or 112C-112D. (Second Year)

Membership based on competitive try-outs.

Year course ($\frac{1}{2}$ - $\frac{1}{2}$).

13A-13B or 113A-113B. Orchestra.

BEIDLEM

13C-13D or 113C-113D. (Second Year)

Year course ($\frac{1}{2}$ - $\frac{1}{2}$).

14A-14B or 114A-114B. Band.

BEIDLEM

14C-14D or 114C-114D. (Second Year)

Year course ($\frac{1}{2}$ - $\frac{1}{2}$).

Applied Music

(Credit for applied music is available only for students majoring in music, and is subject to special permission and arrangement.)

15A-15B or 115A-115B. Stringed Instruments.

15C-15D or 115C-115D. (Second Year)

16A-16B or 116A-116B. Wind Instruments.

16C-16D or 116C-116D. (Second Year)

- 17B or 117A-117B. Voice.
- 17D or 117C-117D. (Second Year)
- 18B or 118A-118B. Piano (Pipe Organ).
- 18D or 118C-118D. (Second Year)

PHYSICAL EDUCATION

MEN'S DEPARTMENT

two-hour activity course each semester is required for the two years senior division. A medical examination is given each student when entering and the work is fitted, as far as possible, to his needs. Physical aptitude tests are given at the beginning in order to classify the student as to physical ability. These are repeated at the beginning of the three succeeding semesters in order to note improvement and to arrange balance program so as to acquire all-round development. The content of the program for the two years is planned to give each student fundamental training in those sports which have carry-over value into after life. Opportunity is given to all students to take part in the regular competitive sports program.

Freshman year.) Self-defense and track and field fundamentals.

Fall ($\frac{1}{2}$).

Tennis, swimming and golf.

Spring ($\frac{1}{2}$).

Sophomore year.) Instruction and competition in handball, basketball and speedball.

Fall ($\frac{1}{2}$).

Instruction and competition in volley ball, baseball and track.

Spring ($\frac{1}{2}$).

Senior B. Track. Spring ($\frac{1}{2}$).

Senior B. Baseball. Spring ($\frac{1}{2}$).

Senior B. Basket ball. Spring ($\frac{1}{2}$).

Senior B. Tennis. Fall and spring ($\frac{1}{2}$).

Senior B. Boxing. Fall and spring ($\frac{1}{2}$).

Senior B. Wrestling. Fall and spring ($\frac{1}{2}$).

Senior B. Cross country. Fall ($\frac{1}{2}$).

Senior B. Swimming. Fall ($\frac{1}{2}$).

Senior B. American football. Fall ($\frac{1}{2}$).

Senior B. Gymnastics. Spring ($\frac{1}{2}$).

Students fulfilling degree requirements for physical education majors and state requirements for teaching credentials in physical education.

Administration of Physical Education.

C. E. PETERSON

problems that arise in the everyday experience of the instructor in physical education, such as policies in administration, classification of students, administration of activities, the organization of the leadership of students, the arrangement and care of the physical equipment, personal

relationships with students, interdepartmental adjustments, rolls, records and reports. Material presented in latest State Department Manual used as basis.

Fall and spring (2).

UPPER DIVISION COURSES

101. Emergencies.

HERE

The accepted procedure in meeting the emergencies which daily arise in schoolroom, play or athletic field, beach, mountains or any of the many places where the physical director is called on for first aid. Special attention given to the arrangement of the apparatus and the activities so that many of the most common accidents are prevented or minimized.

(1)

151. Health Education.

(See Women's Department.)

Fall and spring (2).

155. Applied Anatomy.

C. E. PETERSON

A study of the mechanics of the human skeletal and muscular system and an analysis of their actions in games, formalized activities and general body movements, mechanical strength and durability as influenced by anatomical factors.

(2)

163. Aquatics.

PHYSICAL EDUCATION

Details of handling an aquatic program, with stress on swimming, diving and life-saving; both theory and practice.

Spring (1½).

165. Self-defense Activities.

Both theory and practice of boxing, wrestling and weaponless defense.

Fall and spring (1½).

171. Community Recreation.

C. E. PETERSON AND S.

A course planned to meet the needs of the various workers in community playground systems apart from schools, as well as the needs of directors of play and recreation in social service institutions, industrial plants, shops and factories. Special attention given to scout and crafts, the elementary training of a scoutmaster being part of the course.

Spring (2).

CLVI-A. Sports Methods.

C. E. PETERSON AND S.

Different theories and methods of teaching the more highly organized sports: American football, baseball, basket ball, tennis, and track.

Fall (2).

CLVI-B. Sports Methods.

C. E. PETERSON AND S.

Methods of teaching those sports most adaptable to intramural and interclass competition: golf, handball, soccer, speedball, and volleyball.

Spring (2).

XII-A. Gymnastic Activities.

C. E. PETERSON

Theoretical and practical work in marching, free exercises, and light heavy apparatus. Emphasis on progression and method of presenting material. The simplest and most explanatory terminology.
Fall (2).

XII-B. Gymnastic Activities.

C. E. PETERSON

Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium and on the playground. Work of the recreational or self-interesting type rather than the formal. Climbing, stunts, and pyramid building are given chief attention, although games of low organization are also considered.
Spring (2).

XVI. Technique of Officiating.

GROSS

Methods of officiating all the sports common to the school or college program, also methods of training student officials. Practice in the handling of elementary, junior high, high school, and interclass college competition.
Fall and spring (1).

XXII. Principles of Physical Education.

C. E. PETERSON

The material which seeks to establish the place of physical education and to indicate its indispensable character in modern life.
Fall (2).

XXIV. Physical Education Tests and Measurements.

(2).

PHYSICAL EDUCATION

WOMEN'S DEPARTMENT

All new students are given a medical examination to the end that the physical needs of each student may be determined and her class work adjusted accordingly. Two hours weekly of directed physical activity are required in freshman and sophomore years. Emphasis is upon rhythmic activities, games and sports.

LOWER DIVISION COURSES

Formalized Activities and Group Games. RAW AND ASSISTANTS
Fall and spring ($\frac{1}{2}$).

Stunts and Apparatus. RAW AND ASSISTANTS
Fall and spring ($\frac{1}{2}$).

Athletic Games and Sports. RAW AND ASSISTANTS
Fall and spring ($\frac{1}{2}$).

Rhythmical Activities. RAW AND ASSISTANTS
Fall and spring ($\frac{1}{2}$).

52. Game Activities.

Games suitable for large or small groups in elementary and junior high schools are studied and played. These include rhythmic activities, games of low organization and modified athletic games. Required for the elementary school credential instead of 52C.

Fall and spring ($\frac{1}{2}$).

53. Administration of Physical Education.

Consideration of physical education problems, administration of tests, methods of classifying children for play activities, developing leaders, and carrying on intramural ideals. Particular attention is given posture problems. The content and administration of the state program in physical education form the basis of the course.

Fall and spring (2).

55. Swimming.

Required of all freshmen women majoring in physical education.
($\frac{1}{2}$)

56. Tennis.

Required of all sophomore women majoring in physical education. Tests are given on playing skills and knowledge of teaching technique.
($\frac{1}{2}$)

UPPER DIVISION COURSES

151. Health Education.

A course for teacher-training students which includes the study of diseases, common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear in the school; and the elements which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation.
Fall and spring (2).

155. Applied Anatomy.

(See Men's Department.)
(2)

158. Stunts and Tumbling.

A practical course in personal technique. Progressive series of individual, dual, and group stunts, including simple pyramids.
($\frac{1}{2}$)

161. Folk Dancing.

A series of folk and national dances for elementary and junior high schools. Emphasis is placed on methods of presentation as well as on ability to execute the various dances. Note books are required.
(2)

164. Dancing.

An introductory course to the fields of interpretative, character, and social dancing. Particularly adapted to meet needs of prospective physical education teachers.
(2)

VI. Recreational Leadership.

TANNER AND STAFF

Fundamentals of recreational leadership are developed by instruction in out craft, camp fire lore, girl reserve activities, the study of school recreational needs and facilities, and of civic recreation.

(2)

1. Campcraft.

TANNER AND STAFF

The technique of life in open camp is developed by camp experience. This is preceded by study of selection of equipment, proper outing clothes, tents, making beds in the open, making camp fires, camp cooking, and camp recreations. Enrollment only by permission of the instructor.

(2)

VII-A-B. Sports Methods.

RAW

Practice for skill, study of rules, and of coaching methods. Prerequisite: Season's experience in at least four of the following sports—volley ball, basketball, hockey, speedball, soccer, baseball, tennis, and track activities. Year course (2-2).

IX. Formalized Activities.

TANNER

Study of the scientific adaptation of formalized exercises to individuals and to groups; an activity and methods class with opportunity for supervised practice teaching; elementary exercises on apparatus.

(2)

XXIII. Principles of Physical Education.

TANNER

The relation of physical education to other phases of education, with emphasis upon health and social adaptation.

(2)

XXIV. Physical Education Tests and Measurements.

(2)

XXV. Current Problems in Physical Education.

TANNER

The latest phases of general physical education; problems particularly related to the work with younger children, girls, and college women; the responsibility of the physical instructor toward emergencies and health service.

(2)

XXVII. Individual Program Adaptations.

TANNER

Adjustments of the physical education program to the physical needs and capacities of individuals; problems concerning protective and preventive measures which are not highly specialized corrective phases.

(2)

PHYSICS

Preparation for the major in Physics (lower division) required for the bachelor's degree or certificate: Required: Physics 1A-1B and 1C-1D; Chemistry 1A-B; Mathematics C, 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

LOWER DIVISION COURSES

1A-1B. General.

ANDERSON, M.

Mechanics, properties of matter, and heat. This course aims at development of the fundamental ideas which underlie the subject physics, and the application of them in the discussion of practical problems. Lectures, text assignments, problem sets, and experimental laboratory work. Two lectures, one recitation and one laboratory period each week. Prerequisites: High school physics or chemistry and trigonometry.

Year course (3-3).

1C-1D. General.

BA

A continuation of Physics 1A-1B for students in the sophomore year including magnetism, electricity, sound, and light. Two lectures and one laboratory period each week.

Year course (3-3).

2A-2B. General.

BA

Properties of matter, mechanics, heat, sound, light, electricity, and magnetism. A nonengineering course. Lectures, demonstrations, and discussions. Prerequisite: Two years of high school mathematics.

Year course (3-3).

3A-3B. Physical Measurements.

M

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity, and magnetism. These exercises are usually taken in conjunction with Physics 2A-2B.

Year course (1-1).

UPPER DIVISION COURSES

106. Optics.

BA

A study of refraction, color, interference, diffraction, polarization, radiation, and optical instruments.

Fall (3). (Not offered in 1930-1931.)

107A-107B. Electrical Measurements.

BA

Devoted mainly to the study of potentiometer methods, capacitance, inductance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics.

Year course (3-3).

108. Modern.

BA

An introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity through gases, radiation, and the quantum theory. Prerequisite: Eight units in physics.

Spring (3). (Not offered in 1930-1931.)

PHYSIOLOGY

(See Biological Sciences)

POLITICAL SCIENCE

Preparation for the major in Political Science (lower division): Required for the Junior certificate: Political Science 1A-1B and Economics 1A-1B or History 4A-4B or Geography 1 and 2. High school course is presupposed in the following courses:

LOWER DIVISION COURSES

1B. Comparative Government.

LEONARD

Comparative study of typical European governments and the government of the United States. The first semester: England, France, Germany, Italy and Switzerland. The second semester: The lesser European states and the United States. Year course (3-3).

UPPER DIVISION COURSES

American Institutions.

LEONARD

Origins and principles of the United States Constitution, and a survey of the political institutions which have developed under it. Prescribed by the state law for all candidates for the bachelor's degree and for all candidates for a teacher's credential. Enrollment is limited to juniors and seniors, except with the consent of the instructor. Those taking History 171A-171B or Political Science 113 are excused from this requirement. Attention is called to the fact that this course is offered only during the fall semester. Year course (3).

Theory of the State.

LEONARD

The nature of the state, its organization and activities, and its relation to individuals and to other states. Year course (3).

American Political Ideals.

LEONARD

Underlying theories and principles of American governmental policy. Year course (3).

PSYCHOLOGY

Preparation for the major in Psychology (lower division) required for the Junior certificate: Required: Psychology 1A and 1B, Zoology 10A or Biology 10A-10B. Recommended: French, German, chemistry, physics.

LOWER DIVISION COURSES

General.

STEINMETZ, BELL

An introductory survey of the entire field of psychology. In the study of normal adult human behavior, and the factors which condition it, a conservative position is taken, leaving the student as nearly as possible free to choose his own attitude toward the special schools of psychology. Prerequisite to all courses in Psychology and in Education. Not open to Freshmen, but open to sophomores without prerequisite. Not credited for students who have already earned credit for Psychology 2A. Year and spring (3).

1B. General.

An extensive and intensive study of the entire field of adult human behavior. Prerequisite: Psychology 1A.
Spring (3).

2B. Applied.

A general survey of the results of modern psychology applied to social improvement, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in these fields between scientific, legitimate psychology and the pseudo-psychology that is popular because of its simplicity and plausibility or because of its mysticism.
Spring (3).

UPPER DIVISION COURSES

102C. Genetic—Growth and Development of the Child.

A study of the mental and physical growth and development of the child. Special emphasis is given to norms of structure and function as a basis for an interpretation of variations from them. Behavior problems and the growth of personality traits and conditioning factors of physical and mental hygiene are also stressed. Each student makes an intensive study of one child presenting a problem of physical or mental maladjustment. Case study technique is included. Prerequisite: Psychology 1A and Education CVIII taken previously or at the same time.
Fall and spring (3).

105. Clinical (Mental Testing).

A brief review of the history and rationale of intelligence testing followed by a discussion of the Stanford revision of the Binet-Simon Test, with demonstration and practice. The best group tests of intelligence are discussed and demonstrated. Experience in giving, scoring and interpreting results is required. The purpose of this course is to give teachers information on the subject, to enable each student to find out if by inclination and endowment he is fitted to do scientific testing and to put him in the way of becoming skilled in giving and interpreting intelligence tests. Prerequisite: Psychology 1A, Education CV. Recommended: Psychology 102C and Education CXL.
(3)

145. Social.

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, crowd, public opinion, social control, etc. Prerequisite: Psychology 1A.
(2-3)

EDUCATIONAL PSYCHOLOGY

(See Education)

SECRETARIAL TRAINING

(See Economics)

SOCIAL ECONOMICS

(See Economics)

SPANISH

(See Foreign Languages)

SPEECH ARTS

Preparation for the major in Speech Arts (lower division) required the Junior certificate: Speech Arts 1A-1B, Speech Arts 3A and 5A or Speech Arts 55A-55B.

LOWER DIVISION COURSES

1B. Elements of Public Speaking.

Training in fundamental processes of oral expression; methods of outlining and organizing material; outlining; principles of attention and delivery; extemporaneous speaking and open forum debating; practice in construction and delivery of type forms of speech. Fall and spring (3). (Not offered in 1930-1931.)

Advanced Public Speaking.

Survey of public speaking methods. Study of selections; observation of speaking in community. Organization and delivery of speeches. Analysis of individual problems in speech making. Participation in a public debate or oratorical contest, or the presentation of an equivalent amount of extemporal speaking before public assemblies. The membership of the class limited to twenty. Consultation with the instructor required previous to registration for the course. Fall and spring (2). (Not offered in 1930-1931.)

Argumentation and Debate.

Obtaining and organizing of evidence and the construction and use of a brief; study and discussion of current issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating. Fall and spring (3). (Not offered in 1930-1931.)

55B. Play Production.

JONES

History and technique of dramatic production, with special emphasis on contemporary drama. Rehearsals and presentation of scenes and plays. Arranged for students interested in all the theater arts. Year course (3-3).

55D. Dramatic Interpretation.

JONES

Use of speaking voice, correct diction, gesture, and pantomime. Principles of characterization and standards of acting. Practical working knowledge of different types of plays through rehearsal and presentation. Year course (3-3).

UPPER DIVISION COURSES

155A-155B. Dramatic Workshop.

Advanced work along lines of student's individual dramatic interest: acting, directing, staging, costuming, play writing, etc. Special attention given to creative work and practical experience.

Year course (3-3).

156A-156B. Advanced Play Production.

Special training in educational, recreational and community dramatic activities for professional use. Practical production experience. Prerequisite: Speech Arts 55A-55B and instructor's consent.

Year course (3-3). (Not offered in 1930-1931.)

SURVEYING

1A-1B. Plane Surveying.

Use and adjustment of surveying instruments, computations and map making, together with a study of land, topographic, city and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisites: Trigonometry and Mechanical Drawing.

Year course (3-3).

2. Summer Class in Surveying.

Practical field problems in reconnaissance, triangulation, location of topographic surveys. Observations for meridian, time and latitude. Precise work in linear and angular measurements. Development of self-reliance, accuracy, and professional skill on the part of the student. Four weeks course, commencing after the close of the second semester. Prerequisite: Surveying 1A-1B.

(3) (Not offered in 1930-1931.)

ZOOLOGY

(See Biological Sciences)

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Bulletin
San Diego State Teachers College
— AND —
Announcement of Courses
1931-1932



June, 1931

CALIFORNIA STATE PRINTING OFFICE
HARRY HAMMOND, STATE PRINTER
SACRAMENTO, 1931

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Bulletin

UNIVERSITY OF ILLINOIS

San Diego State Teachers College

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State Teachers College of San Diego

Volume Nineteen

JUNE, 1931

No. 2

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

STATE DEPARTMENT OF EDUCATION

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ex officio Director of Education
AM H. COHN-----Deputy Director of Education

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SAN DIEGO, CALIFORNIA*

CALENDAR 1931-1932

SUMMER SESSIONS, 1931.

Term IA, six weeks, June 29-August 7.

Term IB, nine weeks, June 29-August 28.

Term II, four weeks, August 10-September 1.

FALL SEMESTER, 1931-1932.

September	9,	8.00 a.m.,	College Aptitude Test.*
September	9,	1.30 p.m.,	Assembly of New Students.
September	10,	8.00 a.m.,	Examination in Subject A (English Composition).
September	10,	9.00-12.00 a.m.,	Payment of Fees by Students Who Preregistered.
September	10,	10.30 a.m.,	Assembly of New Students.
September	10,	1.30 p.m.,	Fundamentals Test.*
September	11,	8.30-12.00 a.m., and 1.00-2.00 p.m.,	Registration of Old Students.
September	11,	8.30-12.00 a.m.,	Entrance Examination in Piano (by Appointment).†
September	12,	8.30-12.00 a.m., and 1.00-2.00 p.m.,	Registration of New Students.
September	14,		Class Work Begins.
November	11,		Legal Holiday.
November	26-29,		Thanksgiving Recess.
December	19,		Christmas Recess Begins.
January	4,		Class Work Resumes.
January	25-30,		Mid-Year Examinations.

SPRING SEMESTER, 1932.

February	4-8,		Mid-Year Registration Period.
February	4,	9.00-12.00 a.m.,	Payment of Fees by Students Who Preregistered.
February	4,	10.30 a.m.,	Fundamentals Test.*
February	5,	8.30-12.00 a.m., and 1.00-2.00 p.m.,	Registration of Old Students.
February	5,	8.30-12.00 a.m.,	Entrance Examination in Piano (by Appointment).†
February	6,	8.00 a.m.,	College Aptitude Test.*
February	6,	1.30 p.m.,	Assembly of New Students.
February	8,	8.30-12.00 a.m., and 1.00-2.00 p.m.,	Registration of New Students.
February	8,	2.30 p.m.,	Examination in Subject A (English Composition).
February	9,		Class Work Begins.
March	19-27,		Easter Recess.
May	1,		Dedication Day.
June	8-14,		Final Examinations.
June	16,		Annual Commencement Exercises.

SUMMER SESSIONS, 1932.

Term IA, six weeks, June 27-August 5.

Term IB, nine weeks, June 27-August 26.

Term II, four weeks, August 8-August 30.

* See page 20.

† See page 36.

FACULTY

(1930-1931)

EDWARD L. HARDY, LL.D., President SCHOOL ADMINISTRATION
B.L., University of Wisconsin; M.A., University of Chicago; LL.D.,
La Verne College.
Study of European secondary schools.
Principal of San Diego High School. (Appointed September, 1910.)

IRVING E. OUTCALT, M.A. VICE PRESIDENT AND PROFESSOR OF ENGLISH
A.B., M.A., Stanford University.
Student, University of Illinois; graduate study and research work,
Stanford University, Travel in Europe.
Head of Department of English, San Diego High School.
(Appointed September, 1912.)

W. AULT, M.A. DEAN AND PROFESSOR OF EDUCATION
B.S., Valparaiso University; M.A., University of South Dakota.
Student, Miami University; graduate student, University of Iowa and
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Superintendent of city schools; conductor and instructor in teachers
institutes; Professor of Education at Southern State Teachers College,
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RTHUR G. PETERSON, M.A. DEAN OF LIBERAL ARTS, EX OFFICIO IN
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STUDIES, AND PROFESSOR OF ECO-
NOMICS
A.B., College of the Pacific; M.A., Stanford University.
Graduate student, University of Southern California.
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College. (Appointed September, 1921.)

ADA HUGHES COLDWELL DEAN OF WOMEN
Student, Hopkins Art School and California Medical College, San
Francisco; Columbia University. Special Study in Europe. Licensed
Pharmacist, State of California.
Grade teacher, Alameda, California; Head of Home Economics
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(Appointed Head of Home Economics Department September, 1907;
Dean of Women June, 1915.)

HARLES E. PETERSON, A.B. DEAN OF MEN AND ASSOCIATE PROFESSOR
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OF PHYSICAL EDUCATION FOR MEN
A.B., State Teachers College of San Diego.
Student, Oregon Agricultural College, University of California, and
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Director of Playgrounds, Portland, Oregon; Director of Physical
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A.B., M.A., University of Michigan.
Instructor in Rhetoric, University of Michigan; Associate in English,
University of Washington. (Appointed September, 1928.)

GEORGIA C. AMSDEN ASSOCIATE PROFESSOR OF COMMERCE
Gregg School, Chicago; special secretarial training in various institu-
tions; University of California summer session and extension division
work.

*Retired January 1, 1931.

Teacher in University of California summer school; Traveling Representative and Secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant Editor and Reporter, Daily Press, Ypsilanti, Michigan; Instructor, San Diego High School.

(Appointed September, 1928.)

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B.S., Utah Agricultural College; M.A., Stanford University. Graduate student, Stanford University; University of California Teachers College, Columbia University. Teacher in Public Schools; Primary Supervisor.

(Appointed July, 1928.)

RUTH G. BAGLEY, A.M. ASSOCIATE PROFESSOR OF ENGLISH

A.B., University of Michigan; A.M., University of California. Graduate student, University of Illinois and Columbia University. Head of Department of English, State Normal School, Oshkosh, Wisconsin; Instructor, San Diego Junior College.

(Appointed September, 1921.)

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A.B., University of Wisconsin; M.A., University of California. Graduate student, University of Minnesota. Head of Science Department, University of Wisconsin High School and Stadium High School, Tacoma, Washington; Assistant in Physics Department, University of Washington, Seattle.

(Appointed September, 1921.)

FRED BEIDLEMAN, B.Mus. ASSOCIATE PROFESSOR OF MUSIC

B.S., B.Mus., Columbia University. Teacher of Music, Boys High School, Brooklyn, N. Y.; Instructor, Columbia University; Head of Violin Department, University of Illinois; Assistant Professor of Music, University of North Dakota; Professor of Music and Director of the Conservatory, College of Puget Sound, Tacoma, Washington.

(Appointed September, 1927.)

GERTRUDE SUMPTION BELL, M.A. PROFESSOR OF PSYCHOLOGY

A.B., Indiana University; M. A., Stanford University. Graduate, Indiana State Normal School; Research Work, Clark University. Travel in Europe. Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University.

(Appointed August, 1916.)

MARY BENTON ASSOCIATE PROFESSOR OF ART

Student, Rosemont Dezaley, Lausanne, Switzerland; Chicago Art Institute; New York School of Art; Teachers College, Columbia University; pupil of W. J. Whittmore, miniature painter, and of Sarah Butterworth, craftsman.

(Appointed July, 1916.)

*M. EUSTACE BROOM, M.A. ASSOCIATE PROFESSOR OF EDUCATION

A.B., M.A., University of Illinois. Student, University of Chicago; graduate student, University of Southern California.

Assistant in Psychology, University of Illinois; Teacher in Illinois high schools; Superintendent of Schools, Illinois and West Virginia. Instructor in Education, Extension Division, Concord State Normal School, West Virginia; Teacher, Francis W. Parker School of San Diego; Associate Editor, *The High School Teacher*.

(Appointed February, 1928.)

LESLIE P. BROWN, M.A. ASSOCIATE PROFESSOR OF SPANISH

A.B., Yale University; M.A., Harvard University. Instructor in French and Spanish, Northwestern University; Harvard University; University of North Carolina; University of Chicago.

(Appointed July, 1922.)

* On leave of absence February 1 to August 1, 1931.

- OY E. CAMERON, Ph.D.** ASSISTANT PROFESSOR OF ECONOMICS
 A.B., Ph.D., University of California.
 Student, Creighton University.
 Professor of Economics, University of Omaha; Teaching Fellow in
 Economics, University of California. (Appointed September, 1929.)
- INNIE B. CLARK, A.B.** ASSOCIATE PROFESSOR OF GEOGRAPHY
 A.B., University of Wisconsin.
 Graduate student, University of Chicago; University of Mexico.
 Travel in Mexico and Europe.
 Assistant in Geography, University of Wisconsin; Teacher, Oak Park
 High School, Illinois; Instructor in summer session, University of Cali-
 fornia at Los Angeles. (Appointed September, 1914.)
- ATHERINE E. CORBETT, A. M.** TRAINING SUPERVISOR AND ASSOCIATE
 PROFESSOR OF EDUCATION
 B.Ed., Michigan State College; B.S., A.M., Teachers College, Colum-
 bia University.
 Graduate Public School Music Course, Ypsilanti Conservatory of
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 Teacher in Public Schools, Ypsilanti, Michigan; Training Supervisor,
 Kent State Normal College, Ohio; Evening High School, San Diego.
 (Appointed July, 1921.)
- GRANT CRAMER, M.A.** ASSOCIATE PROFESSOR OF MODERN LANGUAGES
 A.B., M.A., New York University.
 Student, Columbia Law School; University of Leipzig, Germany.
 Twenty years residence, travel, and study in Europe.
 Instructor, French and German, Lehigh University, Bethlehem
 Pennsylvania; Associate Professor, Modern Language Department,
 Boston University; Captain of Infantry, United States Army, Military
 Intelligence Division. (Appointed September, 1928.)
- ALDO H. FURGASON, B.A.** ASSISTANT PROFESSOR OF BIOLOGY
 B.A., St. Olaf College.
 Diploma, St. Olaf School of Music; graduate student, University of
 Southern California and Stanford University.
 Teaching Fellow, St. Olaf College; Instructor in Music, Roosevelt
 Junior High School, San Diego; Instructor in Biology, Stanford Uni-
 versity. (Appointed September, 1926.)
- HN MORTIMER GLEASON, M.A.** INSTRUCTOR IN MATHEMATICS
 AND PHYSICS
 A.B., M.A., University of California.
 Student, Hope College, University of Michigan, and University of
 Southern California.
 Teaching Fellow in Mathematics, University of California.
 (Appointed September, 1930.)
- ORRIS HUBBARD GROSS, A. B.** INSTRUCTOR IN PHYSICAL EDUCATION
 A.B., State Teachers College of San Diego.
 Teacher, Chula Vista Grammar School; Basket Ball Coach, U. S.
 Marines and U. S. Naval Hospital. (Appointed September, 1929.)
- ITH C. HAMMACK, B.A.** TRAINING SUPERVISOR AND ASSISTANT
 PROFESSOR OF EDUCATION
 B.A., State Teachers College of San Jose.
 Graduate of State Normal School of San Diego; graduate student,
 University of California.
 Public School Teacher. (Appointed February, 1911.)
- ROTHY R. HARVEY, M.A.** ASSISTANT PROFESSOR OF BOTANY
 A.B., State Teachers College of San Diego; M.A., University of
 Southern California.
 Graduate student, Scripps Institute for Biological Research, La
 Jolla; University of California.
 Public School Teacher. (Appointed September, 1924.)
- BERT D. HARWOOD, Ph.D.** ASSOCIATE PROFESSOR OF ZOOLOGY
 B.A., Pomona College; Ph.D., Cornell University.
 Assistant in Biology, Cornell University; Field Entomologist, Natural

Survey of Illinois; Teacher, Kern County Union High School at Junior College, Bakersfield; Assistant in Entomology, Cornell University; Stream Survey, Conservation Department, New York.
(Appointed September, 1928)

WALTER B. HERREID, A.B.

ASSISTANT PROFESSOR OF PHYSICAL
EDUCATION

A.B., Washington State College.

Graduate student, University of California and University of Southern California.

Freshman Football Coach, Washington State College; Director of Physical Education, Aberdeen High School, Aberdeen, Washington; Director of Physical Education, Santa Maria Union High School; Coach, Huntington Park Union High School.

(Appointed September, 1930)

EVERETT GEE JACKSON, A.B.

INSTRUCTOR IN ART

A.B., State Teachers College of San Diego.

Student, Agricultural and Mechanical College of Texas; Art Institute of Chicago.

Associate Professor, Sul Ross Teachers College, Alpine, Texas; Instructor, Academy of Fine Arts, San Diego; painter.

(Appointed November, 1930)

MARGUERITE VEASEY JOHNSON, A.M.

REGISTRAR AND ASSOCIATE
PROFESSOR OF LATIN

A.B., Radcliffe College; A.M., Columbia University.

Teacher of Latin, History and French; Assistant in the Registrar Office, Teachers College, Columbia University. (Appointed July, 1927)

MYRTLE ELIZABETH JOHNSON, Ph.D.

PROFESSOR OF BIOLOGY

B.S., M.S., Ph.D., University of California.

Research Assistant, Scripps Institute for Biological Research, La Jolla; Instructor, Pasadena High School. (Appointed September, 1921)

SYBIL ELIZA JONES, M.L.

ASSISTANT PROFESSOR OF ENGLISH

B.L., M.L., University of California.

Director, Junior Players of Pasadena Community Playhouse; Dramatist, Instructor in Chouinard Art School, Los Angeles; Organizing Secretary and Instructor in Play Writing of Summer Art Colony at Pasadena Community Playhouse; Drama Organizer and Director of San Diego Community Service.

(Appointed September, 1925)

GENEVIEVE KELLY, A.M.

INSTRUCTOR IN SOCIOLOGY

A.B., University of California; A.M., Columbia University.

Student, Los Angeles Public Library School. Travel in Europe.

Teacher, Corcoran Union High School. Librarian, Northern Arizona Normal School, Flagstaff; Scripps Foundation for Research in Population Problems, Oxford, Ohio.

(Appointed September, 1924)

MARJORIE KELLY, A.B.

INSTRUCTOR IN ART

A.B., University of California at Los Angeles.

Pupil, in Paris, of Andre Lhote, Painter, and of Mme. Alexandre Exter, Russian Stage Designer.

Instructor in Fine Art, Pasadena Junior High School.

(Appointed September, 1927)

CHARLES B. LEONARD, Ph.D.

PROFESSOR OF HISTORY

A.B., M.A., Ph.D., University of California.

Instructor in History, Lowell High School, San Francisco; Teaching Fellow in History, University of California.

(Appointed September, 1921)

LEWIS B. LESLEY, M.A.

ASSOCIATE PROFESSOR OF HISTORY

A.B., Stanford University; M.A., University of California.

Native Sons' Traveling Fellow in Europe from University of California.

Instructor, Principia School, St. Louis, Missouri; Teaching Fellow in History, University of California; Acting Assistant Professor of American History, Pomona College.

(Appointed September, 1924)

JORGE R. LIVINGSTON, M.A. ASSOCIATE PROFESSOR OF MATHEMATICS
B.S., M.A., University of California.
Instructor, San Diego Junior College; Head of Department of
Mathematics, Santa Barbara Junior College.
(Appointed September, 1921.)

RY RANKIN MOON, A.B. INSTRUCTOR IN ART
A.B., University of California.
Student, State Teachers College of San Diego and Colorado Springs
Academy of Fine Arts. Travel in Europe.
(Appointed September, 1926.)

ABRAHAM P. NASATIR, Ph. D. ASSISTANT PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California.
Native Sons' Traveling Fellow in History in Europe.
Assistant Teaching Fellow in History, University of California;
Instructor in History, State University of Iowa.
(Appointed January, 1928.)

LIAM L. NIDA, M.A. PROFESSOR OF EDUCATION, SUPERVISOR OF
PUBLIC SCHOOL PRACTICE TEACHING.
Ph.B., Ohio State University; M.A., University of Southern Cali-
fornia.
Graduate student, University of Chicago.
Principal of Ohio High Schools; Superintendent of Schools in Illi-
nois; Supervisor, Junior High School, San Diego.
(Appointed July, 1921.)

RLES EDWARD NOWELL, M.A. INSTRUCTOR IN HISTORY
A.B., Stanford University; M.A., University of California.
Student, State Teachers College of Fresno.
Teaching Fellow in History, University of California.
(Appointed September, 1930.)

ALTER T. PHILLIPS, M.A. ASSISTANT PROFESSOR OF SPANISH
AND FRENCH
A.B., University of Washington; M.A., Stanford University.
Student, National University of Mexico. Travel in Mexico.
Teaching Assistant in Spanish and graduate scholarship in Spanish,
Stanford University; Assistant Professor of Modern Languages, Wil-
lamette University.
(Appointed September, 1927.)

FRANCIS PIERCE, Ph.D. PROFESSOR OF CHEMISTRY
B.S., Grinnell College; M.Sc., Tulane University; Ph.D., Stanford
University.
Graduate student, Tulane University; University Fellowship, Stan-
ford University.
Research Assistant and Instructor, University of Idaho; Professor
of Chemistry, Washburn College; Instructor, Tulane University;
Deutsche Chemische Gesellschaft; Lecturer in Chemistry, Mercy
Hospital, San Diego; Research Associate, Grace Deere Velie Memorial
Clinic, Carmel.
(Appointed September, 1923.)

EM M. RAW, A.B. ASSISTANT PROFESSOR OF PHYSICAL EDUCATION
A.B., University of Southern California.
Graduate student, University of Southern California. Travel in
Europe.
(Appointed September, 1923.)

EL M. RICHARDS, A.M. TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION
B.S., A.M., University of Missouri.
Graduate student, University of Southern California.
Rural, City and High School Teacher; City Superintendent of
Schools; Supervisor of Mathematics, Training School, State Teachers
College, Warrensburg, Missouri; Director in Demonstration School,
Northeast Missouri State Teachers College.
(Appointed September, 1921.)

On leave of absence Semester II, 1930-1931.

On leave of absence 1931-1932.

On leave of absence 1930-1931.

- DUDLEY H. ROBINSON, B.Sc.** ASSISTANT PROFESSOR OF CHEMISTRY
 B.Sc. in Sugar Engineering, University of Louisiana.
 Chemist, University of Louisiana Sugar House; Raceland Sugar
 Factory; State Sugar House, Louisiana; Research Chemist, Thorndike
 and Company; Chief Chemist, Pacific Marine Chemicals, Inc.
 (Appointed September, 1911)
- W. T. SKILLING, M.S.** PROFESSOR OF ASTRONOMY
 B.S., M.S., University of California.
 Student, State Normal School, Los Angeles; Stanford University;
 Teacher, Los Angeles County and City public schools; Assistant
 Physics, University of California. (Appointed September, 1911)
- FLORENCE L. SMITH, M.A.** ASSOCIATE PROFESSOR OF ENGLISH
 A.B., Northwestern University; M.A., University of Chicago.
 Instructor, State Normal School, Oshkosh, Wisconsin.
 (Appointed July, 1911)
- L. DEBORAH SMITH, A.M.** ASSOCIATE PROFESSOR OF MUSIC
 Mus.B., A.B., Oberlin College; A.M., Columbia University.
 Graduate student, Stanford University.
 Head of Department of Music, State Teachers College, Winona,
 Minnesota. (Appointed September, 1911)
- MARIAN PEEK SMOOR, A.M.** TRAINING SUPERVISOR AND ASSOCIATE
 PROFESSOR OF EDUCATION
 A.B., A.M., Stanford University.
 Travel in Europe.
 Teacher in Public Schools; Assistant in History, Stanford University;
 Dean of Women, State Normal School, Cheney, Washington;
 Instructor, Francis W. Parker School, San Diego, California.
 (Appointed September, 1911)
- CHRISTINE SPRINGSTON, B.M.** INSTRUCTOR IN MUSIC
 B.A., B.M., University of Redlands.
 Graduate student, University of Redlands and University of
 Southern California; student in piano with A. E. Guerue of St.
 and Olga Steeb of Los Angeles. "Diploma of Execution," Conservatoire
 Americain, Fontainebleau, France; Supervisor of Music, University of
 California; Assistant in Piano, Organ and Theory, University of
 Redlands; Instructor, San Diego High School.
 (Appointed September, 1911)
- HARRY C. STEINMETZ, A.M.** ASSISTANT PROFESSOR OF EDUCATION
 A.B., University of California; A.M., University of Southern
 California.
 Assistant in Journalism, University of the Philippines, Manila;
 Assistant in Educational Psychology, University of California; In-
 structor, Glendale Union High School and San Mateo Junior College.
 (Appointed September, 1911)
- JOHN PAUL STONE, M.S., in Library Science** LIBRARIAN
 B.S., Northwest Missouri State Teachers College; M.S., University
 of Illinois Library School.
 Instructor in English and Public Speaking, Senior High School,
 Joplin, Missouri; library work, University of Illinois Library;
 professor of Library Science, Louisiana State Teachers College.
 (Appointed September, 1911)
- S. LAVENDER STOVALL, B.S.** ASSOCIATE PROFESSOR OF MECHANICAL
 B.S. (Electrical Engineering), University of California.
 Student, University of Texas.
 Research and design of apparatus, General Electric Company;
 Chief Engineer of Mt. Whitney Power and Electric Company; In-
 stitution Engineering; Efficiency Engineer, oil fields of California.
 (Appointed September, 1911)
- ALVENA SUHL, M.A.** ASSISTANT PROFESSOR OF GEOGRAPHY
 A.B., M.A., University of California.
 Teaching Fellow, University of California; teacher in public schools.
 (Appointed September, 1911)

THE RAND TANNER, B.S. ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN

B.S. and Bachelor's Teaching Diploma, Teachers College, Columbia University.

Graduate, Boston Normal School of Gymnastics; Graduate student, University of California and University of Southern California.

Tutor, Brookline, Massachusetts; Supervisor of Physical Education, San Diego County Rural Schools, 1921-1923. (Appointed July, 1904.)

NKLIN D. WALKER, B.A. ASSOCIATE PROFESSOR OF ENGLISH
B.A., (Hons. Oxon.), University of Oxford.

Student, University of Arizona; Holder of Arizona Rhodes Scholarship to Oxford; Graduate student, University of California.

Instructor in Dramatics, Francis W. Parker School, San Diego, California. (Appointed September, 1926.)

WRIGHT, M.A. ASSOCIATE PROFESSOR OF COMMERCE
B.S., M.A., University of California.

Head of Department of Commerce, Visalia Union High School, Visalia, California. (Appointed September, 1921.)

ASSOCIATE (PART-TIME) MEMBERS OF THE FACULTY

ELIZABETH McPIKE BROWN, PH.D. ASSISTANT PROFESSOR OF FRENCH

Ph.B., M.A., Ph.D., University of Chicago.

Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France.
Certificate d' Etudes Françaises, University of Paris.

Assistant in French, University of Chicago; Head of French Department, Rockford College, Rockford, Illinois; Instructor in University of California, Extension Division, San Diego, California.

DEAN BLAKE

INSTRUCTOR IN METEOROLOGY AND CLIMATOLOGY

Meteorologist, United States Weather Bureau, San Diego.

MARIAN EVANS, B.S.

INSTRUCTOR IN EDUCATION

B.S., New York University.

Graduate, State Normal School, Los Angeles; Student, University of California, University of New Mexico, State Teachers College, San Diego.

Teacher, San Bernardino, Sierra Madre, San Marino; Director of Visual Education Activities, San Diego City Schools.

LESLIE S. EVERTS, B.L.

ASSISTANT PROFESSOR OF COMMERCE

B.L., University of Wisconsin.

C.P.A., California, Wisconsin; Public Accountant in Milwaukee, Wisconsin, and San Diego, California.

CONSTANTINE PANUNZIO, PH.D.

PROFESSOR OF SOCIOLOGY

A.B., A.M., Wesleyan University, Middletown, Connecticut; Brookings Institution, Washington, D. C.

Sometime Fellow in Social Research, New York University; Fellow in Social Economics at the Brookings Graduate School, Washington, D. C.

REGINALD POLAND, A.M.

PROFESSOR OF ART

A.B., Brown University; A.M., Princeton University; A.M., Harvard University.

Fellowship from Princeton University to American Academy in Rome.

Director of Denver Art Association; Educational Secretary, Denver Institute of Art; Director of San Diego Fine Arts Gallery.

SPENCER L. ROGERS, A.M.

INSTRUCTOR IN ANTHROPOLOGY

A.B., State Teachers College of San Diego; A.M., Claremont Colleges, Claremont, California.

Student in Archaeology, School of American Research, Santa Fe, New Mexico.

Curator in Anthropology, San Diego Museum.

WILL J. STANTON, LL.B.

ASSISTANT PROFESSOR OF LEGAL HISTORY

LL.B., University of Michigan.

Graduate student, University of Michigan.

Editor legal journal; practicing attorney, Michigan and California; Instructor, San Diego High School and Junior College.

ASSISTANTS

M. M. CRON BOREN	ART
NETH O. COURTNEY, B.S.	BIOLOGY
E H. FRASER, Ph.B.	ENGLISH
TON A. NICOL, B.S.	SURVEYING AND INDUSTRIAL ARTS
EY BOWEN PETERSON	TRAINING SCHOOL

MEDICAL EXAMINERS

ACES ALLEN, M.D.	MEDICAL EXAMINER AND ADVISER FOR WOMEN
SHARBAUGH, M.D.	MEDICAL EXAMINER AND ADVISER FOR MEN

LIBRARY STAFF

PAUL STONE, M.S. IN LIBRARY SCIENCE	LIBRARIAN
VIEVE KELLY, A.M.	ASSISTANT LIBRARIAN IN CHARGE OF CATALOGING
GERMANN, B.S.	ASSISTANT LIBRARIAN IN CHARGE OF CIRCULATION
ET B. STOVALL	ASSISTANT LIBRARIAN IN CHARGE OF MENDING AND LETTERING
E. PRATT, Ph.D.	ASSISTANT LIBRARIAN IN CHARGE OF REFERENCE WORK
LOTTE G. ROBINSON	LIBRARIAN OF TRAINING SCHOOL

STAFF OF REGISTRAR'S OFFICE

UERITE V. JOHNSON, A.M.	REGISTRAR
E BRERETON, Ph.B.	ASSISTANT REGISTRAR
THY MAY HARRISON	SECRETARY TO THE REGISTRAR

STAFF OF BUSINESS OFFICE

VAN HORNE	BUSINESS SECRETARY
ROUCH	ASSISTANT BUSINESS SECRETARY
T. SULLIVAN	TELEPHONE OPERATOR

TRAINING SCHOOL STAFF

ENCE WIGGINS	SECRETARY
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MAINTENANCE STAFF

ISKE	SUPERINTENDENT OF BUILDINGS
N ROTH	SUPERINTENDENT OF GROUNDS
EELIG	ENGINEER
BOWEN	CUSTODIAN

THE COLLEGE

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1898, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received approval of the Legislature, later approved by the Governor of the State and becoming effective July 28, 1921, the designation of State Teachers College, the full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) were offered, both to students preparing for the work of the upper division (junior and senior years) of college and universities and to students preparing themselves for the teaching profession in the new three and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the degree (major in Education) were established for this institution July 30, 1923.

Since July 1, 1927, the courses formerly carried as "junior college" courses have been offered as lower division courses of the regular four-year curricula. On July 12, 1928, the college was authorized by the State Board of Education to offer presecondary curricula with majors in Chemistry, History, English and Romanic languages, and special secondary certification curricula with majors in Physical Education, and all of them leading to the A.B. degree. On January 6, 1930, the State Board of Education authorized the following additional majors in presecondary curricula: Art, Biological Science (Zoology now offered) and Social Sciences (Economics, Geography and History now offered). Also the special secondary certification curriculum with a major in Commerce. On April 12, 1930, the presecondary major in commerce was authorized by the State Department of Education, and also the special secondary certification curriculum with a major in commerce.

For the certification of teachers, the authorized courses (elementary, junior high school and special secondary) are offered and, requiring four years of work, lead to the A.B. degree with any one or a combination of the following credentials: General Elementary School, General High School, Special Secondary in Art, Special Secondary in Commerce, Special Secondary in Music, Special Secondary in Physical Education.

ENVIRONMENT AND STANDARD

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than physical must be taken into account by the student choosing a college. In cultural standards in art, science, literature and science, San Diego is a favorable college city because, though it is not large, yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-16, including the buildings themselves, and in their consistent and effective carrying out of motifs of the best of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology, culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American geology. There is complete cooperation with the directing boards controlling the collections, and the Director of the San Diego Museum is a member of the faculty of the college. The Fine Arts Gallery contains excellent exhibitions of paintings. There are plans for the development of a Public Conservatory of Music for which the great out-of-door organ is making a beginning. Balboa Park, in which all of these facilities are housed, also contains a modern horticultural farm and a great stadium for games, community gatherings and pageants.

La Jolla, within the city limits, the Scripps Institution of Oceanography, operated by the University of California, gives opportunity for constant cooperation in the biological field.

Commerce courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial center, particularly as the college will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The teacher-training program profits because of the policy of cooperation generously followed by the City School Department, which has participated in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary schools, junior high schools, and senior schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the college.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, and sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the winter temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

Recreational opportunities of an unusual number and variety are to students, because of the combination of bay, sea beach, mesas, foot and mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round.

BUILDINGS AND EQUIPMENT

On February 1, 1931, the college was moved to the new buildings campus, located one mile north of the city's principal east-west boulevard, El Cajon Avenue. The campus has an area of one hundred twenty-five acres. The new buildings are part of a general plan to be completed within the next few years. This plan calls for one style of architecture for the entire group of the Spanish-Moorish type, which is well suited to the landscape and climate of the region. The buildings now include the Academic Building, which houses lecture halls, classrooms and administrative offices; Science Building, Library, Little Theater and Training School. Within the next year, a science lecture hall, a structure of the duplex gymnasium type, with adequate facilities for the physical education and development of both men and women will be completed, together with improvement of the campus which will include playing fields and courts for collegiate sports and athletics. The training school is supplied with its own, separate play spaces.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students are required to meet the health standard set by the department of physical education, and all lower division students, unless excused for cause, are required to take the courses in physical education, prescribed for freshmen and sophomores. Furthermore, each student is expected as a matter of efficient student and community life to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. Final ratings of the student are made by his instructors, so that he is at all times known how he stands; but the ability of the student to make his own educational career and to come reasonably near to his best abilities are factors that will count in his final ratings.

Since standards of character, as developed by and measured by his student work, and as revealed by evidences of the possession of thoroughgoing self-respect and community feeling, particularly as to ideals in important matters of citizenship and future parenthood, are more important than all else, every student will have full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conducting of registration, class attendance, conduct of examinations, and the other college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college motto. There is no honor "system," but there is a standard of honor as to how to do in college work. Matters of personal conduct are not the subject of laws and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom, or of student-body by-laws) and usually, are settled by student action.

ORGANIZATION

THE CALENDAR AND REGISTRATION

The college year is divided into the fall and spring semesters of sixteen weeks each, followed by a summer session consisting of terms of six, nine and four weeks. Students may enter at the beginning of either semester and at the beginning of either the six or four weeks' summer term.

The Summer Session meets the needs of regular students who wish to earn credits toward the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work in the summer division.

Registration of students will be made September 11 and 12 for the fall semester, and February 5 and 8 for the spring semester. A duly certified transcript of the applicant's record must be in the possession of the Registrar on or before the day of the applicant's registration.

ADMISSION TO COLLEGE

Freshman Standing.

Every person admitted as a student to this college must be of good moral character, of good health, and of that class of persons, who, of any age, would be admitted to the public schools of the state without restriction. At entrance, every student must take an examination to determine his physical fitness for the teaching profession.

Graduates of accredited public high schools of California, graduates of high schools of California, and graduates of schools of secondary grade in other states recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study and who are recommended by the principal of the school in which such course of study was completed, may be admitted with undergraduate standing.

Candidates may be admitted by either of two methods:

Regular (clear) admission. High school graduates who present five or more recommended units and principals' certificates of recommendation, may be granted regular admission. Graduates of three-year senior high schools must present nine recommended units earned in grades ten, eleven and twelve.

Provisional admission. High school graduates who present fewer than the prescribed number of recommended units, but who through their principals' estimations and recommendations, present satisfactory evidence of ability to profit by courses in teacher training, who have abilities, interests and talents desirable in teaching, and who pass suitable college entrance tests, may be admitted as provisional students. At the close of the first semester in residence, a complete reevaluation of the credentials and records of all such students will be made. Students will

then be granted clear admission, dropped from the college, or for sufficient reason continued as provisional students.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can meet the requirements of either of the above methods. The entrance examinations of the Board are held in June each year (in California at Berkeley, Los Angeles, San Diego, and other places). Application for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made up on a blank form to be obtained from the secretary of the Board upon request.

II. Advanced Standing.

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every such candidate is required to present a duly certified statement of college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Credit is given only for regular college work in institutions uniformly recognized as standard colleges, or colleges maintained primarily for the training of teachers, or professional schools in those fields in which the college grants a special credential.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

III. Special Standing.

Either of the two following types of candidate may be admitted as a special student, provided he is at least 21 years of age. (Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students.)

1. High school graduates who did not make a sufficient number of recommended grades to obtain a principal's recommendation may be admitted as special students in such courses as they seem qualified to undertake. In such cases candidacy for graduation depends upon meeting the scholarship requirement of a C average.

2. A candidate who has not had the opportunity to complete a satisfactory high school course, but who is considered competent to undertake certain courses, may be admitted to special standing. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Such a student may become a candidate for graduation upon removing the high school deficiency.

MATRICULATION RECOMMENDATIONS FOR CERTAIN CURRICULA

In planning to comply with the foregoing requirements for freshman standing, the prospective student is advised to arrange his high school program so as to enable him to enter without handicaps the work of the curriculum to which he seeks admission. Although deficiencies in certain subjects may be removed after admission to freshman standing, such removal will not only reduce the student's opportunity for elective study but may make it necessary for him to extend his college course beyond the normal period of time required for its completion.

In general preparation for a teacher-training curriculum, the prospective student should have attained proficiency in reading, spelling, handwriting, arithmetic, and the use of English.

In preparation for major work in the biological sciences and in the medical and premedical curricula, the prospective student is advised to include chemistry or physics and French or German. For a college major in mathematics or physics, the student should include French or German, geometry, algebraic theory and trigonometry in his high school program, and for a major in chemistry he should include algebraic theory, physics or chemistry. Algebraic theory and trigonometry are recommended for a major in commerce. In his preparation for engineering curricula, the prospective student is strongly urged to lay a good foundation in the study of elementary algebra, plane geometry, algebraic theory, trigonometry, physics, chemistry and mechanical drawing. For a major in English or a foreign language, the study of Latin is recommended.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements. The standing of all students is conditional during the first semester of residence.

REGISTRATION PROCEDURE

REGISTRATION

Registration takes place on two regularly appointed days at the beginning of each semester, one for old students and the other for new ones. Faculty advisers representing every curriculum assist students in the planning of their programs, but students are urged to study the requirements of the curriculum they intend to follow and to decide upon their choice of electives before consulting their advisers. New students should not expect assistance with their programs until registration day. After their first registration, however, students are given the privilege of planning their programs during the preregistration period in the last part of each semester, when they may hold more lengthy consultations with their advisers than on registration day. Since registration is not complete until all fees and course charges have been paid, students should be careful to provide themselves with sufficient funds on registration day.

TESTS REQUIRED AT REGISTRATION TIME AND LATER

(See Calendar for dates.)

1. An examination for the determination of physical fitness is required of all students at entrance. Appointments are made during registration.
2. All students entering the college are required to take the following tests, mainly for purposes of guidance and assistance: (a) College Aptitude Test. (b) English Composition Test.* (c) Social Relations Test. (d) Speech Test. Exceptions may be made for students who register for six units of works or less, for former graduates of this college, and for graduates of approved four-year colleges.
3. The Fundamentals Test in reading, spelling, arithmetic and handwriting is a prerequisite for certain courses in Education (see descriptions of courses in Education). Exceptions may be made for former graduates of this college and for graduates of approved four-year colleges.

LATE REGISTRATION

A new student who registers after the close of the first week of the semester is subject to a limitation of his program. A fee of \$2 must be paid for registration after the regular registration period. After the first week of the semester, the instructor's approval must be secured for each course entered.

CHANGES IN REGISTRATION

Changes in program may be made only with the approval of the student's adviser. The late registration fee of \$2 is required for the

* This is required mainly for classification purposes. The results must be considered by students and advisers in the making of schedules. Students are themselves primarily responsible in the matter of overcoming deficiencies. No student whose use of the English language continues to be notably inaccurate or inadequate should expect to receive a certificate of graduation from the college.

dition of one or more courses after the first week of the semester, if the student is responsible for the change. In addition, the instructor's approval must be secured for entering a course after the first week.

AUDITORS

Regular auditors must register in the usual way, though this may be done on the first day on which they have classes, without payment of the late fee.

EXPENSES

SEMESTER FEES

Registration fee	\$1 50
Short-time (less than six units) registration fee	5 00
Contingent fund fee	10 00
Late registration fee (penalty)	2 00
Fee for additional transcript	1 00
Special examination fee	2 00
Evaluation of record fee	2 00

FEES AND DEPOSITS

(Subject to revision)

	<i>Fee</i>	<i>Deposit</i>
Math: 52A, 61A, 61B, 94, 152C	\$1 00	
Biology: 10A, 10B	2 00	
Botany: 2A, 2B, 4, 5	2 00	
Chemistry: 1A, 1B, 6A, 6B, 7, 8	7 50	\$5 00
101, 102	2 50	5 00
123, 124 (per unit)	2 50	5 00
200 (per unit)	1 00	2 50
Education: 108	1 50	
English: 4A, 4B, 52B, 130	1 00	
60	1 50	
Geography: 1, 1A, 2, 2A, 3, 117, 124	1 50	
History: 4A, 4B, 5A, 5B, 8A, 8B, 145A, 145B, 161, 163, 171A, 171B	1 25	
Music: 2A, 2B	1 00	
Physics: 1A, 1B, 1C, 1D, 3A, 3B, 107A, 107B	3 00	*2 00
Political Science: 1A, 1B, 101, 111, 113	1 25	
Public Economics: 10	50	
Speech Arts: 55A, 55B, 55C, 55D	1 50	
155A, 155B	1 00	
Surveying: 1A, 1B	3 00	*2 00
Biology: 1A, 1B	4 00	
100	3 00	
121	2 00	

* Students having deposits from first semester do not pay the deposits in second semester.

LIVING EXPENSES

The Acting Dean of Women will furnish, upon request, addresses of homes in which board and room may be secured, also lists of apartment houses and single rooms which may be patronized by students.

Board and room, two meals per day, may be procured at from \$35. \$40 per month. Apartments consisting of one room, kitchenette, bath, renting at \$20 to \$35 per month, will accommodate one or two persons. Single rooms with kitchen privileges at from \$10 to \$20 per month are also available. While at present there are very few accommodations in the immediate vicinity of the college, all of those listed are within reasonable distance and easily accessible to the college.

SELF HELP AND LOAN FUND

A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. An employment service for men is conducted by the Dean of Liberal Arts; and a similar service maintained for the women students by the Acting Dean of Women. The general loan fund is available for short time loans to worthy young men and women who have been in attendance at the college one or more years. Loan funds are also administered by the Associated Women Students, The Kiwanis Club of San Diego, the City Teachers' Association, the Scottish Rite Woman's Club, and the Entre Nous Club.

ADMINISTRATIVE REGULATIONS

OFFICERS FOR CONSULTATION

Concerning the housing and living arrangements of students, rules of conduct, dates and arrangements for all student social affairs, personal advice (women)—The Acting Dean of Women.

Concerning matters of student-body policy, leaves of absence (men), personal advice (men), etc.—The Dean of Men.

Concerning supervision of practice teaching, conference, credit requirements, etc.—The Dean of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar and the Board of Student Advisers.

Concerning health and physical condition, college athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The Principal of the Training School.

Concerning student-body affairs—The executive officers of the student body; The Dean of Liberal Arts; the Acting Dean of Women; Dean of Men.

Concerning appointments to teaching positions—The Placement Secretary.

Concerning use of the buildings—Superintendent of Buildings.

CLASSIFICATION

Regular students are those students who have complied with the requirements of admission and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 30 to 49 units of work are classified as sophomores; those who have completed 50 to 89 units, as juniors, and those who have completed 90 or more units as seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work.

Sixteen units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal semester's program for all students. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out a study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average grade of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points. Any course in which a student received a passing grade may be used in the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student under 18 years of age will be allowed to register for less than 12 units without the permission of the Registrar.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus one point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D, otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. Ordinarily to change an I to another grade the work must be completed within a year. In case of failure in a course, no credit is given until the course has been repeated.

To qualify for a certificate in any curriculum or for a transcript of record with recommendation, in transferring to another collegiate insti-

tution, a student must have earned as many grade points as the number of units he has attempted; that is, he must have attained an average of least C grade in all work undertaken at the College. On a transfer of record for a student whose scholarship is below a C average, the honorable dismissal shall be qualified by the phrase "except for scholarship

ELIGIBILITY FOR PRACTICE TEACHING

No student shall be eligible for practice teaching (Education 11) whose entire record, and also his record for the preceding semester, do not average C grade.

PROBATION AND DISQUALIFICATION

A scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the college.

Any student whose scholarship record shows a cumulative deficit of one or more grade points for all work undertaken in the College to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the College. Probationary status may be continued until the cumulative grade-point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

ELIGIBILITY FOR EXTRA-CURRICULAR ACTIVITIES

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any semester is ineligible in the next succeeding semester to represent the college in connection with any athletic, literary, music, dramatic, social, or other organization.

SPECIAL EXAMINATIONS

Special examinations are classified as (1) matriculation examinations; (2) final examinations taken at other than the regular time; (3) examinations taken for the purpose of removing conditions; (4) examinations for advanced standing.

For every special examination given the student shall pay a fee of two dollars at the business office. The instructor shall give such examination only on the presentation by the student of a receipt showing that the fee has been paid.

EXAMINATIONS AT SPECIAL TIMES

No final examinations shall be given to individual students before the regular final. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements with the instructor

ave an incomplete grade reported and must take the deferred final ination not later than the end of the second semester following in which the incomplete was given. No exceptions shall be made is rule without the approval of the dean of the department and the utor concerned.

CONDUCT OF EXAMINATIONS

final examinations shall be written in Blue Books or other forms 1 shall be furnished by the college and distributed by the instructor e beginning of the examination period. No books or papers of any shall be brought into the examination room, except by special order e instructor.

WITHDRAWALS FROM CLASS

student may not withdraw from class without the permission of roprier study-lists officer on a "change of registration card," which be filed in the Registrar's Office. An unauthorized withdrawal a class will result in a mark of failure on the student's record; applies also in the case of complete withdrawal from college. A rawal after the sixth week of a semester except for reasons beyond tudent's control is interpreted as a failure in the course.

LEAVE OF ABSENCE

leave of absence from college for a period not to exceed two weeks be obtained for satisfactory reasons from the Acting Dean of en or the Dean of Men. If the student concerned fails to return to e, he should notify the Registrar's Office. A leave of absence does elieve the student from making every possible attempt to complete ork of each course to the satisfaction of the instructor. Enforced ce beyond two weeks necessitates obtaining the permission of each etor to continue in the course; if the student is refused permission urn to one or more classes, he should arrange at the Registrar's for withdrawal from these courses.

PLACEMENT SERVICE

Placement Office is maintained by the college as a clearing house ployment information for superintendents and employing boards and ts of the college. While the purpose of this office is to assist ates in securing positions, it is the primary aim of the office to about a better adjustment of the teacher to the community. A com-record of college attainments is kept in a confidential file for each rant of the office and this material is made available to employers. mendations are based on records which indicate every item in the ate's equipment, and particular care is taken to select in each case ndidate who can best meet the requirements of the position. A fee 00 is payable each year in which active service is desired.

STUDENT LIFE

ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, The Associated Students. The following list indicates the various activities.

Art Guild, College Orchestra, Delta Kappa (Chemistry), Engineering Club, Golden Quill, International Relations Club, Kappa Delta (National Education Honor), Men's Glee Club, Pendragon, Psychology Club, Spanish Club, Skull and Dagger, Treble Clef Club.

Men: Associated Men Students, College Band, College "Y" Council of Twelve, Delta Phi Beta, Epsilon Eta, Eta Omega, Kappa Phi Sigma, Omega Xi, Phi Lambda Xi, Sigma Lambda, Delta Chi.

Women: Associated Women Students, Cetza, College Y. W. Club, Women's Athletic Association, Alpha Phi Chi, Delta Chi Phi, Gamma Phi Zeta, Kappa Theta, Phi Kappa Gamma, Phi Sigma Nu, S. A. Club, Shen Yo. Sigma Pi Beta, Tau Zeta Rho.

Men's Athletics: Football, baseball, basket ball, track, swimming, tennis.

Women's Athletics: Basket ball, rowing, swimming, and tennis.

Publications: The Aztec (weekly), Del Sudoste (year book), Palenque (quarterly).

ALUMNI ASSOCIATION

The college has an active alumni association. Since its reorganization in March, 1929, the Association has steadily gained in membership. The annual Homecoming is an important event each year; other meetings take place on dates of important athletic contests. The Association sponsors the organization of Aztec clubs in various communities.

DEGREE REQUIREMENTS

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

The electives must be so chosen that, with the required work, the student will have a total of 6 units of credit in English, 12 units in natural science and 12 units in natural science in the lower division. Courses in journalism or in speech arts are not accepted as satisfying English requirements. The electives in natural science may be reduced to a minimum of 6 units if the student presents acceptable work from the high school in natural science in laboratory courses offered in the third or fourth year. In general, each year's work of high school will thus reduce the requirements by 3 units of credit. No credit will be given for the high school work; simply an exemption from requirements will be permitted.

At least 40 of the units completed during the junior and senior years must be in upper division courses (see definition under heading Courses and Instruction). Introductory courses open to first-semester freshmen taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Political Science 101 (American Institutions), or the substitute courses Political Science 113 or History 171A-171B or History 173A-173B is required of all candidates for the A.B. degree.

The minimum requirements in education demanded by the State range from 2 to 24 or more units, and may be ascertained at registration.

A minimum of 124 units of college work is required. Not less than 54 units must be earned in the junior and senior years. All candidates for the A.B. degree must complete at least 30 units of work in college. Twenty-four of these residence units must be taken at the rank of senior, at least twelve of which are to be taken in the spring semester, except that graduates of this college and teachers in California have until the summer of 1935 to complete the requirement without attendance during the academic year. Graduates of the three-year (ninety-six unit) course, which was in force from 1930, may earn the requisite number of units to make a total of one hundred twenty-four by summer session and extension work, provided they attend for two consecutive summers of nine weeks each immediately before graduation, or one summer session of nine weeks and six units of extension work during the same year, taken at this college or in courses given by the University of California by members of San Diego State Teachers College faculty during the same year. Eight to ten units must be taken during these summers in special "partial degree" courses. Graduates from less than the three-year program and other teachers in service in California will be granted the benefit of the two summer session arrangement with the additional provision that all lower division requirements must be satisfied before being accepted as candidates and that their subject matter offering must be found to conform to present standards. Complete information concerning details may be obtained by writing to the Registrar.

The number of grade points acquired in this college by the candidate for a degree must be equal to the number of units attempted. (See page 23 for an explanation of scholarship grades and grade points.)

Students who are planning to secure California teaching credentials through graduation from this college are urged to follow the curriculum pattern for the credential or credentials which they wish to earn, throughout the entire four years.

Students are urged to fulfill the requirements for at least two credentials, as for example, the general junior high school and elementary credentials; the special credentials in art, music, or physical education; and the general junior high school credential (general elementary school credential is also desirable with one of these combinations). In all cases, the curriculum for each credential sought must be complete and full. This will facilitate placement upon graduation, especially for inexperienced teachers.

For the general elementary school credential, two academic teaching minors are required; for the general junior high school credential, one for both the elementary and junior high school credentials together. An academic teaching major and an academic teaching minor are required. An academic teaching major consists of 24 units in a field other than education, twelve of which must be in the upper division. An academic teaching minor consists of 12 units in a field other than education, six of which must be in the upper division. Academic teaching major and minors may be established in the following fields: English, foreign languages, mathematics, natural sciences, physical education, and social sciences (economics, geography, history, political science, sociology). A student who plans to do graduate work in the field of his academic teaching major is advised so to arrange his electives as to complete the secondary major to avoid the necessity of making up an undergraduate deficiency.

Specific requirements for presecondary majors in art, chemistry, commerce, economics, English, foreign language, geography, history, zoology may be found in the section giving the presecondary degree curricula and also immediately preceding the course descriptions in these subjects.

Students who take the A.B. degree with only a special credential and who contemplate doing graduate work for a master's degree at another institution of higher learning in an academic field, are advised to lay their electives to lay a foundation for that work.

CURRICULA LEADING TO TEACHING CREDENTIALS

A.B. Degree With General Elementary School Credential

FRESHMAN YEAR

Semester—	Units of Credit
ogy 10A, ¹ General (unless taken in high school)-----	3
al Ethics -----	0
graphy 1 or 1A, Elements (Natural Science)-----	3 or 2
sical Education 1A or 52A-----	1 or $\frac{1}{2}$
6A, Structure-----	2

1 Semester—

ogy 10B, ¹ General (unless taken in high school)-----	3
graphy 2 or 2A, Regions (Social Science)-----	3 or 2
sical Education 1B or 52B-----	1 or $\frac{1}{2}$
gation 19, Art in the Elementary School-----	2

Semester—

al Economics 10, Introduction to Social Science-----	3
itives, ² including two minors ³ (for the year)-----	11 or 14
	32

SOPHOMORE YEAR

Semester—	
hology 1A, General-----	3
c 1A, Sight-singing and Ear-training-----	2
sical Education 1C or 52, Play Activities (women)---	1 or $\frac{1}{2}$

Semester—

ation 17, Music in the Elementary School-----	2
sical Education 53 or 54, Administration of Phys. Educ.--	2
sical Education 1D or 52D-----	1 or $\frac{1}{2}$

Semester—

ation 1, Introductory Principles-----	3
61A, Elementary Crafts-----	2
61B, Elementary Crafts-----	2
ives, including two minors ⁴ (for the year)-----	14 or 15
	32

possible substitutions for the requirement in Biology 10A-10B.

Botany 2A-2B and Zoology 1A-1B—16 units.

High school Botany plus Zoology 1A-1B.

High school Zoology plus Botany 2A-2B.

High school Botany Plus high school Zoology.

first paragraph of Degree Requirements.

ness minor is English, Natural Science or Social Science.

units in minor taken in Freshman year, none needed in Sophomore

JUNIOR YEAR

First Semester—		Units of
Education 125A, Curricular Activities—Lower Levels-----		3
Education 126, Children's Literature-----		2
Education 129, Mathematics in the Elementary School-----		2
Psychology 102C, Genetic-----		3
Second Semester—		
Education 116, Practice Teaching-----		3
Education 125B, Curricular Activities—Upper Levels-----		3
Either Semester—		
Education 108, Educational Measurements-----		3
Physical Education 151, Health Education-----		2
Political Science 101 (or substitute)-----		2
Electives, including two minors (for the year)-----		7
		30

SENIOR YEAR

First Semester—		
Education 116, Practice Teaching-----		6
Second Semester—		
Education 106, Philosophy-----		3
Electives, including two minors ⁵ (for the year)-----		21
		30

⁵ If 6 units in minor taken in Junior year, none needed in Senior year

A.B. Degree With General Junior High School Credential

FRESHMAN YEAR

Semester—	Units of Credit
cial Ethics -----	0
ology 10A, ¹ General (unless taken in high school) -----	3
ography 1 or 1A, Elements (Natural Science) -----	3 or 2
ysical Education 1A or 52A -----	1 or $\frac{1}{2}$

nd Semester—

ology 10B ¹ , General (unless taken in high school) -----	3
ography 2 or 2A, Regions (Social Science) -----	3 or 2
ysical Education 1B or 52B -----	1 or $\frac{1}{2}$

r Semester—

cial Economics 10, Introduction to Social Science -----	3
ectives, ² including major and minor ³ (for the year) -----	15 or 18
	32

SOPHOMORE YEAR

Semester—

ychology 1A, General -----	3
ysical Education 1C (men) 52, Play Activities (women) -----	1 or $\frac{1}{2}$

nd Semester—

ysical Education 1D or 52D -----	1 or $\frac{1}{2}$
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r Semester—

ication 1, Introductory Principles -----	3
ectives, ² including major and minor ⁴ (for the year) -----	24 or 25
	32

JUNIOR YEAR

Semester—

ication 125B, Curricular Activities—Upper Levels -----	3
itical Science 101, American Institutions (or substitute) -----	2
ychology 102C, Genetic -----	3
ication 108, Educational Measurements -----	3

nd Semester—

ication 116, Practice Teaching -----	3
--------------------------------------	---

ossible substitutions for the requirement in Biology 10A–10B:

1. Botany 2A–2B and Zoology 1A–1B—16 units.
 2. High school Botany plus Zoology 1A–1B.
 3. High school Zoology plus Botany 2A–2B.
- See first paragraph of Degree Requirements.
 Unless major or minor is English, Natural Science or Social Science.
 6 units in minor taken in Freshman year, none needed in Sophomore

JUNIOR YEAR—Continued

		Units of
Either Semester—		
Curriculum in Field of Academic Major	-----	2
Physical Education 151, Health Education	-----	2
Electives, including major and minor (for the year)	-----	12
		30

SENIOR YEAR

First Semester—		
Education 116, Practice teaching	-----	6
Second Semester—		
Education 121, Principles of Secondary Education	-----	2
Either Semester—		
Education, elective	-----	2
Electives, including major and minor ⁵ (for the year)	-----	22
		30

⁵ If 6 units in minor taken in Junior year, none needed in Senior year

A.B. Degree With Special Credential in Art

This course leads to the A.B. degree and to the Special Credential in which entitles the holder to teach art in senior high, junior high, elementary schools.

LOWER DIVISION

	Units of Credit
6A-6B, Structure-----	4
61A-61B, Elementary Crafts-----	4
Education 1, Introductory Principles-----	3
Education 19, Art in the Elementary School-----	2
English-----	6
Natural Science-----	12
Physical Education 1A-1B, 1C-1D (Men) ; 52A-52B, 52C-52D (Women)-----	4 or 2
Psychology 1A, General-----	3
Social Science, incl. Social Econ. 10, Intro. to Social Science--	12
Social Ethics (First semester, freshman year)-----	0
Electives, including additional Art for major-----	14 or 16
	64

UPPER DIVISION

Education 116, Practice Teaching (4 units in special field)--	9
Education 119, Art in the Junior High School-----	2
Education 121, Principles of Secondary Education-----	2
Education 125B, Curricular Activities—Upper Levels-----	3
Education, elective (suggested: Education 106 or 108 or 130)--	3
Physical Science 101, American Institutions (or substitute)---	2
Electives, including additional courses in Art-----	39
	60

SUMMARY

Major-----	50
Education-----	24
English-----	6
Natural Science-----	12
Physical Education-----	4 or 2
Physical Science 101, American Institutions-----	2
Psychology-----	3
Social Science (including Soc. Econ. 10)-----	12
Electives-----	11 or 13
	124

Students who wish to secure the General Junior High School Credential arrange their electives to satisfy the requirements of that pattern and choose Social Science or Natural Science as an academic teaching elective. Complete requirements may be found on page 31.

See first paragraph of Degree Requirements.

A.B. Degree With Special Credential in Commerce

This course leads to the A.B. degree and to the Special Credential in Commerce, which entitles the holder to teach commercial subjects senior high, junior high, and elementary schools.

LOWER DIVISION

	Units
Economics 1A-1B, Principles of-----	6
Economics 11, Economic History of the United States-----	3
Economics 14A-14B, Accounting-----	8
Economics 18A-18B, Commercial Law-----	6
Education 1, Introductory Principles-----	3
English 1A-1B, Composition-----	6
Geography 1, Elements (Natural Science)-----	3
Geography 2, Regions (Social Science)-----	3
Mathematics 2, Mathematics of Investment-----	3
*Natural Science-----	9
Physical Education 1A-B-C-D, or 52A-B-C-D-----	4 or
Psychology 1A, General-----	3
Secretarial Training A, Business Mathematics-----	1
Secretarial Training 3A, Office Methods and Appliances-----	3
Social Economics 10, Introduction to Social Science-----	3
Elective-----	1 or
	65

UPPER DIVISION

Economics 121, Business Administration-----	3
Economics 140, Statistical Methods-----	3
Economics 160, Advanced Accounting-----	3
Economics 161, Cost Accounting-----	3
Economics 163, Machine Accounting-----	3
Education S21, Penmanship Methods (to be taken in Summer Session)-----	2
Education 116, Practice Teaching-----	9
Education 121, Principles of Secondary Education-----	2
Education 163, Stenography-----	2
Education 164, Bookkeeping-----	2
Education 165, Typewriting-----	2
Education, Elective (Educational Psychology recommended)-----	3
Geography 141, Economic Geography-----	3
Geography elective, upper division-----	3
Political Science 101, American Institutions-----	2
Secretarial Training 1A-1B, Typewriting-----	6
Secretarial Training 5A-5B, Stenography-----	10
	61

* See first paragraph of Degree Requirements.

SUMMARY

	Units
economics -----	38
education -----	25
english -----	6
geography (minor) -----	12
mathematics -----	3
natural Science (in addition to Geography, incl. in minor) --	9
physical Education -----	4 or 2
political Science 101, American Institutions -----	2
psychology -----	3
secretarial Training -----	20
social Economics 10, Introduction to Social Science -----	3
elective -----	1 or 3
	126

A.B. Degree With Special Credential in Music**

This course leads to the A.B. degree with a Special Credential in Music entitling the holder to teach music in senior high, junior high and elementary schools.

	Units
Education 1, Introductory Principles (sophomore year)-----	3
Education 17, Music in the Elementary School-----	2
English -----	6
*Music, Applied -----	18
Music 1A-1B, 1C-1D, Sight Singing and Ear Training-----	8
Music 2A-2B, Appreciation and History-----	4
Music 4A-4B, Elementary Harmony-----	6
Music 11A-B-C-D, or 12A-B-C-D or 20A-B-C-D-----	2
‡Natural Science -----	12
Physical Education 1A-1B, 1C-1D (Men) ; 52A-52B, 52C-52D (Women) -----	4 or 2
Psychology 1A, General (sophomore year)-----	3
Social Science, incl. Soc. Econ. 10, Intro. to Social Science--	12
Social Ethics (First semester, freshman year)-----	0

UPPER DIVISION COURSES

Education 106, Philosophy-----	3
Education 116, Practice Teaching (at least 4 units in Music)	9
Education 121, Principles of Secondary Education-----	2
Education 127, Music in the Secondary School-----	2
Education, elective -----	3
Music 103A-103B, Appreciation and History-----	2
Music 105A-105B, Advanced Harmony-----	4
Music 107A, Conducting -----	2
Music 108A, Instrumentation-----	2
Music 111A-B-C-D, or 112A-B-C-D, or 120A-B-C-D-----	2
Political Science 101, American Institutions (or substitute)	2
Electives -----	11 or 13
	124

* Applied Music to be distributed as follows:

Orchestral instrument(s)-----	6
**‡‡ Piano, 2 years-----	6
Voice, 2 years-----	6

(Applied Music credits, $1\frac{1}{2}$ units per semester, for not less than one lesson per week, with six hours practice per week, totaling at least ten hours instruction and one hundred hours practice per semester. Applied Music is taken under outside private teachers, subject to the approval and supervision of the music department of the college, which determines credits and grades by examination.)

‡ See first paragraph of Degree Requirements.

‡‡ Minimum attainment for completion of Piano Requirement in Music curriculum is the ability to play accompaniments such as are found in the Teachers Manuals of the Progressive Music Series, Books Three and Four.

** Applicants for admission to the Music curriculum will be required to take an entrance examination in Piano, to determine their ability to play satisfactorily hymns and folk songs of the type found in the Golden Book of Favorite Songs. Those not able to meet this requirement must study piano without credit until able to pass such an examination.

SUMMARY

	Units	
Education -----	24	
English -----	6	
Music major -----	50	
Natural Science -----	12	
Physical Education -----	2	
Political Science 101, American Institutions -----	2	
Psychology -----	3	
Social Science (including Soc. Econ. 10) -----	12	
Electives -----	11	or 13
	124	

By choosing English or Natural Science or Social Science as the minor, the General Junior High School Credential may also be earned with this degree. Complete requirements may be found on page 31.

A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high and elementary schools.

MEN**LOWER DIVISION**

	Units
Anthropology 50A-50B, General (sophomore year)-----	6
Biology 10A-10B, General (unless taken in high school)----	6
or	
Zoology 1A-1B, General-----	8
Education 1, Introductory Principles (sophomore year)----	3
English -----	6
Music 2A, History and Appreciation-----	2
or	
Speech Arts 1A, Elements of Public Speaking-----	3
†Natural Science-----	6 or
Physical Education :	
1A-1B, 1C-1D-----	4
6A, Tennis-----	$\frac{1}{2}$
54, Administration-----	2
Psychology 1A, General (sophomore year)-----	3
Red Cross Swimming Test-----	$\frac{1}{2}$
Social Science, incl. Soc. Econ. 10, Intro. to Social Science----	12
Social Ethics (first semester, freshman year)-----	0
Electives -----	12-13
	64

UPPER DIVISION

Education 116, Practice Teaching-----	9
Education 121, Principles of Secondary Education-----	2
Education 125B, Curricular Activities—Upper Levels-----	3
Education, elective-----	7
Physical Education :	
101, Emergencies -----	1
151, Health Education-----	2
155, Applied Anatomy-----	2
156A-156B, Sports Methods-----	4
162A-162B, Gymnastic Activities-----	4
163, Aquatics -----	$1\frac{1}{2}$
165, Self Defense-----	$1\frac{1}{2}$
166A-166B, Technique of Officiating-----	2
171, Community Recreation-----	2
172, Principles-----	2
180, Tests and Measurements-----	2
Sports and Athletics-----	1

† See first paragraph of Degree Requirements,

MEN—Continued

UPPER DIVISION—Continued

	Units
ical Science 101, American Institutions (or substitute)---	2
hology 102C, Genetic (first semester, junior year)-----	3
ogy 100, Embryology-----	3
ogy 114A, Genetics-----	2
ogy 121, Entomology-----	3
tives -----	10-11
	64

SUMMARY

ation -----	24	
ish -----	6	
ic 2A or Speech Arts 1A-----	2	or 3
ral Science (including Biol. 10A-10B or substitute)---	12	
sical Education major-----	30	
ical Science 101, American Institutions-----	2	
hology -----	6	
al Science (including Soc. Econ. 10 and Anthro. 50A-50B)	12	
ogy (upper division)-----	2	or 3
tives -----	26-28	
	124	

tudents are advised to secure the General Junior High School Credential in addition. The requirements may be met at the same time if a double academic teaching major is chosen; the minor subject may be added. For complete requirements, see page 31.

WOMEN

LOWER DIVISION

	Units
Anthropology 50A-50B, General-----	6
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A-1B, General-----	8
Education 1, Introductory Principles (sophomore year)-----	3
English -----	6
Hygiene 2, Personal and Civic-----	2
Music 2A, History and Appreciation-----	2
or	
Speech Arts 1A, Elements of Public Speaking-----	3
†Natural Science -----	4
Physical Education :	
52, Play Activities-----	$1\frac{1}{2}$
52A-52B, 52D-----	$1\frac{1}{2}$
53, Administration -----	2
55, Swimming -----	$1\frac{1}{2}$
56, Tennis -----	$1\frac{1}{2}$
Psychology 1A, General-----	3
Social Science, incl. Soc. Econ. 10, Intro. to Social Science--	12
Social Ethics (first semester, freshmen year)-----	0
Electives -----	12-13
	64

UPPER DIVISION

Education 108, Education Measurements -----	3
Education 116, Practice Teaching -----	12
Education 121, Principles of Secondary Education-----	2
Education 125A, Curricular Activities—Lower Levels-----	3
Education 140, Educational Statistics -----	3
or	
Education 106, Philosophy -----	3
Education, elective -----	2
Physical Education :	
102, Emergency and Safety Programs-----	1
151, Health Education -----	2
155, Applied Anatomy -----	2
157A-157B, Sports Methods-----	4
158, Stunts and Tumbling-----	1
160, Formalized Activities -----	2
161, Folk Dancing -----	2
164, Dancing -----	2
170, Recreational Leadership -----	2
173, Principles -----	2
or	
180, Tests and Measurements-----	2
168, Physiology of Exercise-----	2
175, Current Problems -----	2
177, Individual Program Adaptations-----	2

† See first paragraph of Degree Requirements.

WOMEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions (or substitute) ---	2
Psychology 102C, Genetic (first semester, junior year) -----	3
Biology 100, Embryology -----	3
or	
Biology 114A, Genetics -----	2
or	
Biology 121, Entomology -----	3
Electives -----	11-10
	60
SUMMARY	
Education -----	27
English -----	6
Hygiene -----	2
Music 2A or Speech Arts 1A -----	2 or 3
Natural Science (including Biol. 10A-10B or substitute) -----	12
Physical Education major -----	31
Political Science 101, American Institutions -----	2
Psychology -----	6
Social Science (including Soc. Econ. 10, Anthro. 50A-50B) ---	12
Biology (upper division) -----	2-3
Electives -----	23-25
	127

Students are advised to secure the General Junior High School Credential in addition. The requirements may be met at the same time if suitable academic teaching major is chosen; the minor subject may be omitted. For complete requirements, see page 31.

Administration and Supervision Credentials

The State Board of Education has authorized this college to make recommendations for the issuance of Administration and Supervision Credentials for holders of Elementary and Junior High School credentials who have completed the required 15 units beyond the requirements for the teaching credential and who have completed two years of successful teaching experience.

In order to secure the recommendation of this college for either one of these credentials, the following number of the 15 required units must be completed at this institution:

1. Graduates of this college—6.
2. Graduates of other institutions—9.
3. County certified teachers—12.

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND THE A.B. DEGREE IN THE PRE-SECONDARY CURRICULA

This course leads to the A.B. degree. Completion of the requirements of this curriculum also enables the graduate to satisfy the undergraduate requirements for the General Secondary credential which, with postgraduate work, will enable the holder to teach in a senior high school or junior college. The degree courses are limited to majors in biology, chemistry, commerce, economics, English, geography, history, Roman languages and zoology.

The junior certificate will be granted on the completion of 64 units of college work and the degree on the completion of 124 units. Certain requirements of the junior certificate may be met by courses taken in the high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree.

LOWER DIVISION

FRESHMAN YEAR		Units Sem. I	Units Sem. II
Social Ethics -----		1	
Orientation -----		1 or ½	1
Physical Education -----		2	
Hygiene 2 (women) -----		3	3
English ¹ -----		3-5	3
Foreign Languages ² or electives -----		3	3
Social Sciences ³ -----		1½-5	4
Natural Sciences ⁴ and/or electives, ⁵ including preparation for the major -----		16	16
SOPHOMORE YEAR			
Physical Education -----		1 or ½	1
Foreign Languages ² -----		3	3
Additional year courses ⁶ -----		3	3
Social Sciences ³ -----		3	3
Natural Sciences ⁴ or electives -----		3	3
Electives, ⁵ including preparation for the major -----		3-3½	3
		16	16

¹ The English requirement may be satisfied either in the Freshman year or in the Sophomore year.

² At least 15 units in not more than two languages required in the lower division, except that only 10 units in a modern language are required in the commerce major. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

³ To be chosen from the following: Anthropology 50A-50B, Economics 1A-1B,* 11, 18A-18B, Geography 1-2,* History 4A-4B,* 5A-5B,* 8A-8B, Political Science 1A-1B,* Social Economics 50.

⁴ Twelve units are required.

A maximum of 6 units of the following high school laboratory courses may be used to meet the natural science requirement when these courses are offered exclusively for students in the third or fourth year of the high school. Each year of the high school course will be counted in satisfaction of 3 units of the requirement: Physics,* Chemistry,* Botany, Biology, Physiology, Zoology.

A minimum of 6 units must be chosen from the following: Astronomy 1, 11, Biology 10A-10B,* Botany 2A*-2B,* 4, 5, Chemistry 1A*-1B,* 6, 6B,* 7-8,* Geology 1A, Physics 2A-2B, 3A-3B,* 1A-1B,* 1C-1D,* Zoology 1A*-1B,* 100.*

total of not more than 12 units of the applied and vocational courses below will be counted toward the degree or the junior certificate:

griculture 20, 26; Art 61A-61B; Journalism 53A-53B, 153A-153B; 1A, 1B, 1C-1D, 19A-19B, 19C-19D, 20A-20B, 20C-20D, 109A-109B; 110B, 119A-119B, 119C-119D, 120A-120B, 120C-120D, 121A-121B, courses in Applied Music, and all musical organizations; Physical Education 3A-B to 14A-B, 52, 53, 54, 55, 56, 151, 155, 156A, 156B, 157A, 157B, 162A, 162B, 163, 165, 166A, 166B, 168, 170, 171, 172, 173, 174, 175, 178A, 178B, 179, 180; Secretarial Training, all courses.

In addition to the minimum requirement of 15 units in not more than languages, of 6 units in English, and of year courses in high school elementary algebra and plane geometry, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses.

Latin: Two years of high school courses in Latin or Latin C-D.

Mathematics; 1A-1B, 3A-3B, 7A-7B, or any combination of 3A, 8, C, or 7, C. Mathematics 1A-1B, or equivalents, and Mathematics 2 are required of all students with the Commerce major.

Philosophy: 5A-5B.

At least one of the courses marked with an asterisk must be chosen to meet the social science requirement and the natural science requirement, respectively.

LOWER DIVISION REQUIREMENTS FOR PRE-SECONDARY MAJORS

The student is advised to choose his major as early in his college career as practicable so that he may be able to plan his work according to the major requirements. Failure to meet the lower division requirements of the major department before the junior year may make it impossible to satisfy the upper division requirements within the normal span of two years.

Art

At least fourteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art 1A-B, 5, 6A-6B, 50A-50B or the accepted equivalents, and four additional units in art.

Chemistry

Chemistry 1A-1B with a grade of C or better, 6A-6B, 11-12, and 13A-13B or 1A-1B, Mathematics C and 3A-3B or their equivalent, and reading knowledge of German. Recommended: Physics 3A-3B or 3A-3B, Mathematics 4A-4B.

Commerce

Economics 1A-1B, 11, 14A-14B (6 units); English 1A-1B; Geography 1A-1B; Mathematics 2; History 4A-4B or 8A-8B or Political Science 1A-1B.

Economics

Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 1A, 2B; Geography 1 and 2. Recommended: Social Economics 50; Economics 14A-14B, 18A-18B.

English

English 1A-1B and six units from 56A-56B, 52A-52B. Recommended: Reading knowledge of German or French.

Foreign Languages

Group major: French A-B, C-D and Spanish A-B, C-D.

Geography

Geography 1 or 1A, 2 or 2A, 3 and Geology 1A. Recommend reading knowledge of French or German.

History

History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1 Economics 1A-1B, or Geography 1 and 2. No student shall enroll more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-

Zoology

Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and

Additional lower division majors available for the Junior certificate may be found immediately preceding the course descriptions in the of astronomy, journalism, mathematics, physics, political science, zoology and speech arts.

UPPER DIVISION

For requirements in upper division courses, residence requirements, scholarship requirements for graduation, see regulations under the General Requirements for the Degree of Bachelor of Arts.

For restrictions on applied and vocational courses see footnote 5 lower division requirements.

Political Science 101, American Institutions, or the substitute in Political Science 113 or History 171A-171B or History 173A is required of all candidates for the A.B. degree.

Three units in general psychology must be included in the upper division program if not taken in the lower division.

A minimum of 12 units in education is required and a maximum of 18 units will be counted toward the degree. The courses in education to be chosen from the following list:

Ed. I, Introductory Principles (lower division elective); Ed. 101, Principles of Secondary Education; Ed. 106, Philosophy of Education; Ed. 107, History of Education; Ed. 108, Educational Measurements; Ed. 109, Educational Administration and Supervision; Ed. 117, Comparative Education; Ed. 130, Educational Psychology; Ed. 140, Elementary Statistics; Psychology 102C, Genetic Psychology.

A minimum of 12 units in a minor subject is required, at least 6 of which shall be in upper division courses completed in the junior or senior years. Minors are available in the following subjects: art, chemistry, economics, English, foreign language, geography, history, mathematics, music, physical education, physics, political science, psychology, zoology.

The major requirements of one of the following fields must be completed

Art

at least than twenty-four units of upper division art. These shall be Art 112A, 115A-115B, 150A-150B, 152A, 195, and eight upper division elective units in art.

It is recommended that students in meeting degree requirements and choosing free electives, select from the following courses: English 106A-106B, 117; French A-B, History 4A-4B, 111A-111B; and Arts 55A-55B, 155A-155B.

Chemistry

Units in excess of fourteen are counted as upper division units when in the junior or senior year. The minimum requirement for the major must include Chemistry 7-8, 101-102 and 123-124. The organization of the course for the major student must follow a definite plan approved by the department. The related minor must also be approved by the department.

Commerce

Commerce 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, and 18 units additional chosen in one of the following groups:

Accounting: Econ. 160, 161, 162, and 9 units in electives.

Banking and Finance: Econ. 131, 133, 134, 135, and 6 units in electives.

Marketing and Merchandising: Econ. 123, 125, 171, and 9 units in electives.

County and Municipal Administration: Econ. 122, 131, 151, and 3 units in electives in Economics; Soc. Econ. 150, 155; Pol. Sci., 6 units. Recommended: 6 additional units in Political Science to complete a major; a reading knowledge of French or German.

Commerce 141 may be used in the electives under A, B, C.

Economics

Required: Economics 100 and 140, with 9 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171, 194 and Elective: 3 upper division units in general and applied economics; 12 additional upper division units in any combination of general and applied economics, social economics, and economic geography.

English

Twenty-six units in English, of which not more than six may be in composition and public speaking and not more than nine in composition. At least fifteen units in upper division courses must be completed in the junior and senior years.

Foreign Languages

Upper major: Eighteen upper division units in one language or twelve units in one language and six units in the other.

Lower group major requirements are based on the assumption that the student will have taken courses in the high school, equivalent to the

college course in elementary French or Spanish. A student who receives matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for the third semester of the college course.

Geography

Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

History

Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student in his senior year, enroll in History 199, in connection with which he will write a paper, the subject matter to be arranged in consultation with the instructor.

Zoology

(1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, physiology and anatomy.

Lower Division Arrangements and the Junior Certificate

The State Board of Education has authorized fields in which majors and minors may be given in the California Teachers Colleges as follows: Agriculture, Art, Biological Science, Education, Commercial Education, English, Foreign Languages, Home Economics, Industrial Arts Education, Mathematics, Music, Physical Education, Physical Science, Philosophy, Psychology, Social Science.

Since the professional training of teachers requires the maintenance of the standard lower division courses in the field of letters and sciences, certain courses are available for students of this college who wish to make adaptations of their lower division curricula to correspond to the type of lower division preprofessional curricula. The completion of a curriculum will give junior standing upon transfer to a college offering upper division work in the appropriate field. Such available adaptations of freshman and sophomore courses offered by this college are: Prelegal, Premedical, Predental, social service, engineering, preagricultural, accounting, secretarial training. Special advisers have been appointed for each of the above curricula, who will assist students at registration time in making out programs so that they may qualify for the Junior Certificate. A list of these advisers is published in the Time Schedule each semester.

COURSES OF INSTRUCTION

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks.

Courses numbered from 1 to 99 are lower divisions (freshman or sophomore) courses; those numbered 100 and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. First semester sophomores who have an average grade of not less than 2.0 grade points in second semester sophomores who have an average grade of not less than 1.5 grade points may enroll in an upper division course provided they were registered in at least twelve units in the preceding semester. It is understood that ordinarily the instructor will be consulted by sophomores wishing to take upper division courses. In such cases an upper division course will count as lower division credit.

AGRICULTURE

Nature Study.

SKILLING

This course is designed to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life histories of the plant and animal world (for lower grades). May be credited as natural science only for students majoring in Education.

Fall and Spring (2).

Home Floriculture.

SKILLING

This course is designed to familiarize students with material in gardening and methods of propagation. A part of the work consists in path house practice and visits to nurseries, greenhouses and fields. Especially designed to furnish a part of the equipment needed by those intending to teach nature study and general science. May not be credited toward the requirement in natural science.

Fall and Spring (2).

ANTHROPOLOGY

Anthropology 50A-50B. Man's Evolutionary History. BRYSON, ROGERS
Origin and antiquity of man. Classification of races. Origin and development of civilization. Prerequisite: Sophomore standing.
Year course (3-3).

ART

Preparation for the presecondary major (lower division), required also for the Junior certificate: Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division

work. These shall include Art A-B, 5, 6A-6B, 50A-50B or the accepted equivalents, and four elective units in art.

Presecondary major (upper division): Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150A-150B, 152A, 195, and eight upper division elective units in art.

It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses: English 4A-4B, 106A-106B, 117; French A-B; History 4A-4B, 111A-111B; Speech Arts 55A-55B, 155A-155B.

LOWER DIVISION COURSES

Art Appreciation and History

5. Fundamentals.

JACKSON

An illustrated lecture course intended to increase appreciation and to give a basic understanding of the elements and principles of art as expressed in the architecture, painting, sculpture, and crafts of the past and present.

Fall and Spring (2).

Design

6A. Structure.

KELLY, BENTON

Fundamentals of design and composition and theory of color. Basic course used as a prerequisite for all advanced art work.

Fall and Spring (2).

6B. Structure (continued).

KELLY, BENTON

Original work in creative design with special stress on modern tendencies. Prerequisite: Art 6A.

Fall and Spring (2).

11A. Industrial Design.

KELLY

Problems in creating original designs for decorative and useful articles: jewelry, lamps, and objects that may be made in various materials by hand or machine process. Prerequisite: Art 6A-6B.

Fall (2).

11B. Applied Design.

JACKSON, KELLY

Designing and completion of actual objects by the students. Several processes involved as carving, painting, dyeing, block printing, batik, and the like. Prerequisites: Art 6A-6B, 11A.

Spring (2).

14A. Lettering.

KELLY

A study of fundamental art principles applied to lettering. Practical for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.

Fall (2).

14B. Posters and Commercial Art.

KELLY

The application of lettering to posters, newspaper and magazine advertising and other forms of commercial art. The study of composition combined with lettering and special study of modern tendencies in publicity. Prerequisites: Art 6A, 14A.

Spring (3).

Stage Design.**BENTON**

Theory of line, color, and lighting in relation to the stage. Original and costumes developed on a miniature stage. Study of the development of the modern art of the theater. Upper division credit will be given in this course to students of junior standing upon the completion of a theme work and additional original problems. Prerequisite: Art 6A.

Year course (3).

Costume Design.**KELLY**

Original problems in designing modern costumes. A study of line, color, texture, type, and suitability to the wearer and to the occasion; design and historic influence on dress. Prerequisite: Art 6A.

Year course (3).

*Drawing and Painting***Freehand Drawing.****JACKSON**

Semester I: Problems involving perspective to develop ability to draw still life, furniture, exteriors, interiors and the like.

Semester II: Outdoor sketching of landscape and figure, and studio work from still life and costume pose. Emphasis on composition and technique in the handling of various mediums, pencil, pen and ink, charcoal, pastel and water color.

Year course (2-2).

515B. Painting.**JACKSON**

Semester I: The representation of still life, flowers, and figure poses in oil color and oils.

Semester II: Landscape and figure painting emphasized. Prerequisite: Art 515A-B.

Year course (2-2).

*Crafts***516 and 61B. Elementary Crafts.****BENTON, BOREN**

Practical problems in the handling of materials through such problems as clay modeling and pottery, paper making, book binding, weaving, basketry, and elementary woodwork, involving such projects as puppet construction, toys, etc.

Year course (2-2).

UPPER DIVISION COURSES*Art Appreciation and History***Appreciation and History.****JACKSON**

A survey of the development of painting, sculpture, architecture, and crafts from the dawn of art to the Renaissance, by means of illustrated lectures and discussion. (Not open to freshmen, except by special permission.)

Year course (2).

150. Appreciation and History.

POLAND, JACK

The period from the Renaissance through the Modern School, treated in the same manner as in Art 50A. (Not open to freshmen, except by special permission.)

Spring (2).

*Design***112A. Composition.**

K

Quick, imaginative composition of natural forms in black and white and color. Prerequisites: Art A-B, 6A-6B, 15A.

Fall (2).

112B. Illustration.

K

Composition fulfilling the requirements of book illustration from popular imaginative tales, and legends, in black and white and color. Prerequisite: Art 112A.

Spring (2).

152A. Stage Design.

BEN

See Art 52.

152B. Stage Costume.

K

Costume studied in relation to drama. Original designs for mood and character. Practical problems in designing and decorating costumes and accessories for college productions. A brief history of costume from Egyptian to the modern time. Prerequisites: Art 6A, 52.

Spring (3).

152C. Stagecraft.

J

Stage terminology and technique. Scene building and decoration. Materials and their treatment for stage effects. Experience in scene and lighting college productions. Prerequisite: Art 52 or 152A.

Spring (3).

195. Home Decoration.

BEI

House planning and landscaping. Interior decoration. Study of period styles and modern decoration. Illustrated lectures and original problems. Prerequisites: Art A, 6A.

Spring (3).

*Drawing and Painting***115A. Life Drawing.***

Charcoal and pencil drawing from the nude model. Short poses for memory training and long poses for drawing and technique.

Fall and Spring (2).

115B. Life Drawing and Painting.*

Drawing and painting from nude and costume models. Prerequisite: Art 115A.

Fall and Spring (2).

C. Advanced Painting.*

Painting from nude and costume models. Portraiture. Prerequisites: 115A, 115B.

ASTRONOMY

Preparations for the major in Astronomy (lower division) required for junior certificate: Astronomy 1, Plane Trigonometry, Mathematics 3B, 4A-4B, Physics 2A-2B and 3A-3B or 1A-1B and 1C-1D, a reading knowledge of French or German.

Descriptive Astronomy.**SKILLING**

A cultural course planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature. Especial attention to the methods and instruments by means of which astronomical knowledge has been gained. An observatory equipped with a six-inch Alvin Clarke telescope used for observation. Demonstrations given with a large spectrometer; also a good selection of lantern slides used to illustrate various topics. Prerequisite: Elementary Algebra and Plane Geometry.

Fall and Spring (3).

Historic Development of Astronomy.**SKILLING**

The leading facts now known in astronomy in the light of circumstances attending their discovery. Prerequisite: Astronomy 1.

(3).

Modern Astronomy.**SKILLING**

Stars and nebulae. Modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisites: Astronomy 1 and a knowledge of Physics.

(3).

BIOLOGICAL SCIENCES

(Biology, Botany, Zoology)

General students who wish to take only one or two courses in this Department should register for Biology 10A-10B, 114A or 114B (see below for prerequisites for each course).

Preparation for the presecondary major in zoology (lower division): Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4 and 5.

Preparation for the major in Botany (lower division), required for the junior certificate: Botany 2A, 2B, 4, 5 and Chemistry 1A.

Presecondary major zoology: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, physics and physiology. (The college now requires two years of work in preparation for the botany major.)

Students preparing to teach science in the junior high school should include in their courses work in zoology, botany, physics, chemistry (at least high school chemistry), and Education CXX. The following are

These courses can be taken in the night class at the college or at San Diego Academy of Fine Arts. Special fees will be charged.

also desirable: geography, geology, anthropology, astronomy, and upper division biological sciences.

Fees: A fee is required in all laboratory courses in this department (See page 21 for list of fees). The fee covers the cost of materials used. For breakage and extra material in addition to the estimated need, an extra charge must be made.

BIOLOGY

LOWER DIVISION COURSES

10A-10B. General.

M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in heredity. Laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic facts of biology. It is designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and one three-hour laboratory period per week. Designed for those who do not expect to specialize in zoology or botany, but not open for credit to students who have taken Zoology 1A, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1A or Botany 2A for credit.

Year course (3-3).

BOTANY

LOWER DIVISION COURSES

2A. General.

HARVEY

Fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week. Fall (4).

2B. General.

HARVEY

A continuation of 2A treating morphology and relationship of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Spring (4). (Offered in even-numbered years).

4. California Plants.

HARVEY

Classification and ecology of representative orders of flowering plants in the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week.

Spring (2).

5. Trees and Chaparral.

HARVEY

Practice in the determination of the important species of the San Diego region. One lecture and three hours laboratory per week, with several Saturday field trips.

Spring (2). (Offered in odd-numbered years).

UPPER DIVISION COURSES

Plant Geography. HARVEY
 Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or Botany 4, or equivalent.
 Fall (2).

Taxonomy. HARVEY
 Identification, classification, and distribution of representative orders of flowering plants. Six hours per week of lectures, laboratory, and field work. Prerequisite: Botany 2A-2B, 4.
 Spring (3). (Offered in even-numbered years.)

Marine Plant Biology. HARVEY
 Marine algae of the San Diego region, including a study of structure, development, identification, and distribution. Collecting trips to the various beaches will be made. Prerequisite: a laboratory course in general biology or botany.
 (3). (Offered in summer session of 1931).

Special Study. INSTRUCTORS OF THE DEPARTMENT
 (M. E. JOHNSON in charge)
 Leading or work other than is outlined in the above courses. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least three units of lower division work in the department with a grade of A or B.
 Fall and spring (1 or 2).

ZOOLOGY

LOWER DIVISION COURSES

General. HARWOOD
 An introduction to animal biology dealing with structure, functions, and evolution of animal life. Laboratory work supplementing the lectures based on the study and observation of living and preserved material. Suitable to the general student as well as to the biology specialist, maintaining one with the fundamental facts and theories of biology that they pertain to animal life. Two lectures or recitations and two three-hour laboratory periods per week.
 Fall (4).

General. HARWOOD
 Continuation of 1A. The structure, relationships, and classification of the chordates. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A.
 Spring (4).

UPPER DIVISION COURSES

Embryology. M. E. JOHNSON
 The development of vertebrates as illustrated by the frog, chick and mammal. Six hours of laboratory and one hour of lecture per week. Prerequisite: Zoology 1B or Biology 10B.
 Spring and Fall (3). (Offered in odd-numbered years.)

112. Marine Zoology.

Designed to acquaint the student with the many interesting animals found along the beaches in the San Diego region. Identification, distribution, associations, structure, and to some extent, behavior and life histories of the organisms will be studied. Frequent collecting trips to the beach and study of the living animals in the laboratory. Prerequisite: A laboratory course in elementary Biology or Zoology.

(3) (Offered in the summer session of 1931.)

114A. Genetics.

HARWOOD

General introductory course designed to acquaint the student with the fundamental principles of heredity and variation. Special attention given to the Mendelian interpretations of the facts of inheritance. Two lectures per week.

Fall (2).

114B. Evolution.

FURGAISON

The development of theories of evolution. Two lectures per week. Spring (2).

121. Entomology.

HARWOOD

The classification, life-history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and three hours of laboratory per week.

Spring (3). (Offered in odd-numbered years.)

113A. Taxonomy and Natural History of the Vertebrates.

HARWOOD

Frequent field trips and the identification of preserved material. One hour of lecture and six hours of laboratory per week. Prerequisite: Zoology 1B or Biology 10B.

Spring (3). (Offered in even-numbered years.)

113B. Ornithology.

The study and identification of birds, especially those of the Pacific coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1B, Biology 10B.

Spring (3). (Offered in odd-numbered years.)

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT

(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission only by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of work in the department with a grade of A or B.

Fall and Spring (1 or 2).

CHEMISTRY

Preparation for the presecondary major (lower division) required for the Junior certificate: Chemistry 1A-1B with a grade of C or better, 6A-6B, Physics 2A-2B or 1A-1B, Mathematics C and 3A-3B or the equivalent, and a reading knowledge of German. Recommended: Physics 3A-3B or 1C-1D, Mathematics 4A-4B or 9.

ressecondary major (upper division): All units in excess of fourteen counted as upper division units when taken in the junior or senior. The minimum requirement for the major must include Chemistry 101-102 and 123-124. The organization of the course for the major must follow a definite plan approved by the department. The required minor must also be approved by the department. In addition, Mathematics 107 is required.

LOWER DIVISION COURSES

B. General Chemistry. PIERCE, ROBINSON
The general principles, laws of chemical combination, and a description of the elements and their important compounds. Two lectures, one quiz and two laboratory sessions per week. The second semester laboratory includes qualitative analysis throughout. Prerequisites: High school chemistry and high school physics and trigonometry.
First year course (5-5).

C. Qualitative Analysis. PIERCE
Qualitative separations and theories as applied not only to solutions but to ores, slags, alloys, and solid salts. One hour lecture and quiz, and two laboratory periods. Prerequisite: Chemistry 1A-1B.
First year course (4).

D. Introductory Quantitative Analysis. PIERCE, ROBINSON
Determinations by gravimetric, volumetric, and electro-analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.
First year course (3-3).

E. Organic Chemistry. ROBINSON
The carbon compounds (aliphatic and aromatic) and their derivatives, including the synthesis of different compounds and the proof of their constitution. A general consideration of the subject and the principles involved. Two lectures or quiz and one laboratory period, first semester; one lecture or quiz and two laboratory periods, second semester. Prerequisite: Chemistry 1A-1B.
First year course (3-3).

F. Mathematics of Chemical Calculation. ROBINSON
Applied mathematics for chemical calculation, including the calculus applied to physico-chemical problems.
First year course (3). (Offered as Mathematics 107 in 1931-1932.)

UPPER DIVISION COURSES

G. Advanced Inorganic Chemistry. PIERCE
The laws and theories of elementary work from the viewpoint of physical chemistry. Laboratory work covering such typical items as equilibrium, mol weights, laws of combination, ionization, equilibria (homogeneous, heterogeneous and complex) and electrochemistry. Two lectures,

two laboratory periods per week. Prerequisites: Chemistry 1A 6A-6B, 7-8. Mathematics 4A-4B or 107.

Year course (4-4).

110. Industrial Chemistry.

ROBIN

A course of lectures on the application of chemistry to the arts, most important industries embraced and principles of evaporation, tillation, sublimation, filtration, crystallization, calcination, refrigeration, use of fuels and water purification discussed. Prerequisites: Chemistry 6B-8.

Spring (3).

123-124. Organic Preparations.

PR

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. A reading knowledge of German required. Laboratory and conferences. Prerequisite: Chemistry 7-8. Hours to be arranged.

Year course (2 to 5-2 to 5).

125. History of Chemistry.

PN

Development from time of Geber on reading, report, and seminar basis. Consideration of both experimental advances and production of the experiments by the Ostwalds, Remsen, Emil Fisher, and Victor Meyer. Prerequisites: Chemistry 101-102.

Fall and Spring (2).

130. Teaching of Chemistry.

PN

Laboratory planning, fitting, optional fields of development beyond basic matter are covered. Relative methods of presentation and a consideration of various texts and manuals. Prerequisite: Chemistry 101-102.

Spring (2).

200. Research.

THE ST

Special investigational work on such problems as equipment and laboratory will permit. Open to students of senior standing only. Prerequisites: Chemistry 102, 124.

Fall and Spring (2 to 5).

ECONOMICS

Preparation for the presecondary major in Economics (lower division) required also for the Junior certificate: Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 1A, 2B; Geography 1 and 2. Recommended: Social Science 50; Economics 14A-14B, 18A-18B.

Presecondary major (upper division) in Economics, required: Economics 100 and 140, with 9 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171, 194 and 199. Elective: Three upper division units in general and applied economics; 6 additional upper division units in any combination of general and applied economics, social economics, and economic geography.

Preparation for the presecondary major in Commerce (lower division) required also for the Junior certificate: Economics 1A-1B, 11, 14A-1

units): English 1A-1B; Geography 1-2; Mathematics 2; History 4B or 8A-8B or Political Science 1A-1B.

ressecondary major (upper division) in Commerce, required: Economics -18B (it is recommended that this be taken in the lower division if able), 121, 140, and 18 units additional chosen in one of the following groups:

1. Accounting: Economics 160, 161, 162, and 9 units in electives.
2. Banking and Finance: Economics 131, 133, 134, 135, and 6 units in electives.
3. Marketing and Merchandising: Economics 123, 125, 171, and 9 units in electives.
4. County and Municipal Administration: Economics 122, 131, 151, and 3 units in electives in Economics; Social Economics 150, 155; Political Science, 6 units. Recommended: 6 additional units in Political Science to complete a minor; a reading knowledge of French or German.

Geography 141 may be used in the electives under A, B, C.

LOWER DIVISION COURSES

1B. Principles of Economics.

CAMERON

The basic principles of economics: utility wealth, value, price; economic production, distribution, and consumption; rent, interest, wages, profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and finance; transportation corporations, labor problems, socialism, taxation.

Aims of the course: (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to enter business pursuits a broad foundation in economic principles; and (3) to introduce future citizens to political and economic problems of the time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Year course (3-3).

Economic History of the United States.

WRIGHT

A comprehensive survey of American economic development and of national legislation in the field of industry.

Year course (3).

-14B. Accounting.

WRIGHT

A knowledge of bookkeeping not required and not advantageous. The balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting and closing of books for different types of businesses; organizations, reorganizations, dissolutions and combinations; branch stores accounting, etc., keeping in view the best modern accounting practice. Eight hours lecture and laboratory.

Year course (3 or 4-3 or 4).

-18B. Commercial Law.

STANTON

The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions, rather than the development of those principles. The subjects covered: contracts, sales, agency, partnerships, corporations,

real property, negotiable instruments, insurance and wills, with a study of evidence.

Year course (3-3).

UPPER DIVISION COURSES

100. Modern Economic Thought.

A. G. PETER

Classical doctrine in the light of recent economic theory. A critical analysis of contemporary economic thought. Prerequisite: Economics 1A-1B.

Spring (3).

121. Business Administration.

A. G. PETER

Problems of business administration as an interrelated whole and an indication of lines of study which may lead to the solution of the problems. A discussion of the problems of the business administrator with particular reference to the character of the problems involved in the control policies and devices of the manager. Questions, problems and case studies. Prerequisite: Economics 1A-1B.

Fall (3).

123. Marketing.

Our distributive organization and its functions, including the marketing of both agricultural and manufactured products. Prerequisite: Economics 1A-1B.

Spring (3).

125. Advertising and Salesmanship.

Principles and problems.

(4)

127. Urban Land Economics.

CAME

The development of urban economy, location and structure of cities, urban land utilization, city planning and zoning, taxation, housing, urban land credit and land valuation, with special emphasis upon local conditions. Prerequisite: Economics 1A-1B.

Spring (3).

131. Public Finance.

Principles and practice of taxation, public expenditures, and financial administration. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1931-1932.)

133. Corporation Finance.

CAME

The corporate form of organization, instruments of long-time financial methods of raising capital, efficient financial management, and the financialing of reorganizations. Prerequisite: Economics 1A-1B.

Fall (3).

134. Investments.

CAME

Investment analysis and the investment of personal savings.

Spring (3).

Money and Banking.

CAMERON

elements of monetary theory. History and principles of banking special reference to the banking system of the United States. Prerequisite: Economics 1A-1B.

II (3).

Statistical Methods.

BROOM

introductory study of the statistical measures and devices most commonly used in connection with work in the field of economics. Opportunity given to obtain practice in the use of calculating machines and other to computation. Prerequisite: Two years of high school algebra.

II (3).

Personnel Administration.

A. G. PETERSON

principles of scientific management, labor turnover, selection and placement of personnel, discipline and discharge, methods of wage payment, health and safety, labor participation in management. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1931-1932.)

Advanced Accounting.

WRIGHT, EVERTS

intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory costing, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different types and kinds of businesses. Six hours lecture and laboratory. Prerequisite: Economics 14A-14B.

II (3). (Not offered in 1931-1932.)

Cost Accounting.

WRIGHT, EVERTS

principles and methods of cost accounting in the mercantile establishment and in the factory. A study of bookkeeping procedure, the forms and their application to practical problems. Prerequisite: Economics 14B.

Spring (3).

Accounting Systems.

WRIGHT, EVERTS

the accounting systems used in various types of business and financial concerns. Some practice in devising and installing systems. Prerequisite: Economics 14A-14B.

Spring (3). (Not offered in 1931-1932.)

Machine Accounting.

WRIGHT

the application of mechanical accounting devices to accounting concerns together with a study of efficient machine methods that conform to good accounting practice and yet meet the practical accounting requirements that are found in many classes of business. In addition to a thorough study of machine installations, the course requires considerable practice in the operation of standard accounting machinery. Prerequisite: Economics 14A-14B.

II (3).

171. Transportation.

CAM

The development of railway transportation; railroad financing; and rate making; government regulation; government operation of roads during the war; recent development of motor and air transportation current problems. Prerequisite: Economics 1A-1B.

Fall (3). (Not offered in 1931-1932.)

194. International Economic Relations.

A. G. PETE

A brief treatment of certain geographical, sociological, and legal phases of international relations followed by a study of the commercial and industrial basis of world economy touching upon number of special problems involved and supplemented by an introductory study of matters covering the processes, principles, and policies of international trade.

The course concerns itself primarily with the economic basis of international relations, but political aspects are almost constantly taken account in recognition of the fact that international relations are frequently political in form but economic in content.

Spring (3). (Not offered in 1931-1932.)

199. Seminar in Economics.

THE S

Designed exclusively for seniors with a major in economics or commerce. Spring (2).

Economic Geography

(See Geography)

Social Economics**LOWER DIVISION COURSES****A. Social Ethics.**

Required of all entering students. A course aimed to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relation of women to society—of men to society. One hour per week for 9 weeks.

Fall and Spring. No credit.

1. Orientation.

A. G. PETER

An orientation course planned to furnish educational and vocational guidance. Lectures and collateral reading. Required of all freshmen who are candidates for the Junior certificate or the degree in the secondary curricula.

Fall and Spring (1).

10. Introduction to Social Science.

PANU

Man's descent, race, social organization, ideals of conduct, and civilization. Modern problems.

Fall and Spring (3).

50. General Sociology.

KE

A study of the nature and organization of human group activity, including the relation of cultural heritage to public opinion and social change. Previous preparation in biology and psychology recommended.

Fall and Spring (3).

UPPER DIVISION COURSES

Science of Society.

PANUNZIO

advanced study of social environment, basic sociological concepts principles, social institutions and organizations, social origins, social class, social control, and social values. Open to students who have completed Economics 1A-1B or Social Economics 50 and to other properly qualified juniors and seniors by special arrangement. Texts, directed reading, lectures, reports on research.

11 (3).

Social Problems.

PANUNZIO

progress, social change, and social adjustment; with a detailed study of problems of population, the family, social problems of economic life and problems of socialization. Prerequisite: Social Economics 150 or consent. Upper division students who have not met the above prerequisite may be admitted by special permission of instructor.

11 (3).

Social Progress.

PANUNZIO

study of the idea of social progress; the goals, the means and agents achieving these goals; great peaks of human progress; criteria; methods for evaluating the movement. Lectures and collateral reading.

11 (3). (Not offered in 1931-1932.)

Introduction to Social Investigation.

PANUNZIO

theory and practice of social science research. Selection of a social or economic topic for investigation by each student, on which he conducts researches, and makes frequent reports of progress. Open by permission of instructor to such juniors and seniors as have shown in Social Economics 150 an interest in some specific field and a capacity to undertake research.

11 (3). (Not offered in 1931-1932.)

Social Psychology

(See Psychology)

Secretarial Training

Business Mathematics.

WRIGHT

practical course in the mathematics of business. Development of the ability to add, subtract, and divide rapidly and accurately. A thorough study of interest, compound interest, discount, amortization tables, insurances, etc.

1. No credit.

1. Typewriting.

AMSDEN

rapid development of a thorough command of a keyboard by the shorthand method. The acquisition of speed and the artistic arrangement of written material with special reference to commercial forms, tabulations and billing; specifications, legal forms, and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit given for

this course except in the curricula in accountancy and secretarial training. Ten hours lecture and laboratory practice.

Year course (3-3).

2A. Typewriting. AM

A short course designed for those not wishing to enter the business but desiring a knowledge of the use of the typewriter. Five hours laboratory practice.

Fall (2).

3A. Office Methods and Appliances. WR

Practice and principles of office management, including organization, arrangement, and operation. Study and use of modern office appliances such as the multigraph, mimeograph, filing devices, calculating and adding machines. Trips made to local establishments to study actual business conditions. Prerequisite: Secretarial Training or its equivalent.

Spring (3).

5A-5B. Stenography. AM

An intensive course designed for the practical preparation of office stenographers. A thorough study of the Gregg System. Development of ability to read and write shorthand rapidly and correctly, both literary and commercial. The shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit given for this course except in the curricula in accountancy and secretarial training.

Year course (5-5).

6A. Advanced Stenography. AM

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary material.

Spring (3).

EDUCATION

LOWER DIVISION COURSES

1. Education—Introductory Principles. BAG

An orientation course in professional education. A preliminary survey covering briefly the historical and philosophical background of the modern public school and culminating in a consideration of modern educational practice, with special reference to public and quasi public organizations which more or less directly participate in the program of education.

Fall and Spring (3).

17. Music in the Elementary School. L. D. S.

Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, singing, and part singing. Conducting. Prerequisite: Music 1A.

Fall and Spring (2).

Art in the Elementary School.**BENTON**

A practical application of the elements and principles of art to problems for grades 1-6. Presented through lectures, reports, demonstration lessons and laboratory work. Prerequisite: Art 6A or its equivalent. Fall and Spring (2).

UPPER DIVISION COURSES**Philosophy of Education.****AULT**

The fundamental biological, psychological, philosophical social principles underlying modern education, in connection with the demands of modern society in a complex social, economic, and scientific world, with a view to formulation of a working philosophy for the educative process. Designed as a culmination of the studies of education and its procedures. Open only to students with senior standing. Spring (3).

History of Education.**AULT**

A brief study of early Hebrew, Greek, Roman and early Christian education; of the changes brought about by the Renaissance; of the transition to modern secular education; brief reviews of the educational philosophies of the great reformers; a concluding study of the development of the American school system and of American ideals and practices in education. Only 2 units allowed for students having credit for Education S107, History of Education in the United States (offered in the summer session). Fall (3).

Educational Measurements.**BROOM-STEINMETZ**

Brief survey of the development of scientific testing in the elementary school; examination of the principal intelligence and achievement tests, study of uses; statistical training in handling data of simple problems; practice in construction of various kinds of objective examinations. An additional hour a week set aside for occasional section meetings, laboratory practice, coaching. Open only to students who have passed the Fundamentals Test. Fall and Spring (3).

Educational Administration and Supervision.**HARDY**

A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc. Prerequisites: Education 125B, or equivalents. Spring (2).

Educational Organization and Supervision.**BROOM**

A study of types of supervision and methods of evaluating and improving teaching. Prerequisites: Education 125B, 108 or equivalents. Spring (2).

111. English in the Junior High School.

BAG

Objectives of literature and language teaching in the junior high school; criteria for selection of material; technique of classroom procedure; observation in the city schools. Prerequisite: The satisfaction of the lower division requirements in English for the teaching major in English.

Spring (2).

112. Mathematics in the Junior High School.

RICHAR

The subject matter, management of it and methods of teaching it in the junior high school curriculum in general mathematics. Specific problems: The application of arithmetic in current social and business life, intuition, geometry, graphic representation, the phase of algebra suitable to the junior high school pupil, preparation for senior high school mathematics. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

(2)

114. Social Science in the Junior High School.

NE

The teaching of some of the elementary facts and principles of "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies as the junior high school curriculum as history, geography and civics. Methods of developing a genuine and continuing interest in social and civic problems through observation and reading, discussed and illustrated. Special stress on evaluating historical and geographical material for its educative purposes on this level. Prerequisites: Four units of geography and six units of history.

Fall (2).

116. Practice Teaching.

AULT AND SUPERVISOR

Systematic observation, participation and actual teaching under competent supervision in the Training School and in the city schools of San Diego. The general plan for a student who has not had teaching experience is to take one period of practice teaching daily for a semester and two periods daily for another. In some cases the second assignment is for a half day. Only in case of an extreme emergency will a student who has not had experience in teaching be permitted to satisfy all practice teaching requirements in a single semester. It is planned to distribute the practice teaching assignments so that the student will have some experience in both upper and lower grades, with the emphasis on the grade or grades in which the student is particularly interested. Deviation from this plan is very liable to result in unsatisfactory training and is tolerated only when unavoidable.

One period of teaching daily for a semester is usually credited with two or three units and two periods with four to six units, depending upon the character of the assignment and the work. When more time is needed the student is assigned to additional practice.

The practice teaching requirements of a minimum of eight units and maximum of twelve units are usually reduced for those who have had successful teaching experience. The usual requirement for inexperienced teachers is nine units. Practice teaching credit is usually reduced to four units by the universities. Students planning to transfer to such institutions should be prepared to meet this reduction with an equivalent amount of acceptable units in other subjects.

Prerequisites: Passing grade in Fundamentals Test; C average in all college work and in work of the preceding semester; three units of credit in Psychology and six units of credit in Education. No credit will be given for this course unless registration is made in the office of the Dean of Education.

School and Classroom Management.

CORBETT

A study of the problems of control, classroom routine and other factors which condition the learning process in the elementary school. Special emphasis is laid on ways and means of developing self-direction in pupils through participation in all activities. Discussion of factors involved in the purposes served by carefully made programs serving best interests of the school.

2)

Art in the Junior High School.

BENTON

Art curriculum planning for junior high schools and studio problems and discussion. **Prerequisite:** Education 19 and preparation for a teaching major in Art.

Spring (2).

A-120B. Science in the Junior High School.

The content, methods, field work, textbooks, laboratory work, equipment, and reference reading for Junior High School Science. **Prerequisite:** 18 units of college science.

A. Biology.

M. E. JOHNSON

Prerequisite: Eighteen units of college science including Biology 10B or Zoology 1A-1B and Botany 2A-2B.

Fall (2).

B. Physical Sciences.

SKILLING

Prerequisite: Eighteen units of college science including Physics 12B or equivalent and high school or college chemistry.

Spring (2).

Principles of Secondary Education.

NIDA

The principles of educational science that should underlie the organization, administration and curriculum of the secondary school. Prevalent patterns of high school education; tendencies in the direction of its development. Particular attention to the method of directing teaching in the secondary schools. **Prerequisites:** Psychology 1A and Education 1, or equivalents.

Fall and Spring (2).

Romance Languages in the Junior High School.

BROWN

Consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value. **Prerequisite:** Two years of college French or Spanish.

3).

125A. Curricular Activities—Lower Levels.

HAMMA

Units of work; characteristics of children in the primary grade organization of the activity program, activities and materials based on children's interests and need through the local environment; teaching and learning procedures for acquiring basic abilities, reading, language, writing, use of numbers; observation and participation in actual classroom situations. No credit for those who have had Education 125.

Candidates for the Elementary Credential are required to take Education 125A and 125B, preferably in the order listed. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (3).

125B. Curricular Activities—Upper Levels.

SM

Units of work; characteristics of children in middle and upper grade organization of the program in terms of children's interests and capacities; techniques of developing abilities in reading, use of numbers; language expression; investigations of methods and materials of basic studies; observation of typical teaching procedures. No credit for those who have had Education 104. See note under Education 125 concerning these two courses. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (3).

126. Children's Literature.

COBB

The principles of selection underlying the choice of literature for elementary school, with special emphasis on the social and educational status of the child. Source material and its classification. A critical examination and evaluation of new literary materials for children's books and a discussion of the best illustrators of books for children. Practice in developing technique in story telling through practical work in Story Hours.

Fall and Spring (2).

127. Music in the Secondary School.

L. D. SM

Main objectives of music teaching in the public secondary school. Organization of the chorus and glee clubs, voice testing, seating, a survey of song materials available. Organization of courses in applied music, harmony, history and appreciation. Prerequisite: Education 17.

Fall (2).

129. Mathematics in the Elementary School.

RICHA

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics together with study and observation of the newer methods as used under ordinary classroom conditions. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (2).

130. Educational Psychology.

BR

The learning process, including such topics as laws and types of learning, curves of learning and of forgetting, economy of learning, amount

and limits of improvement, spread of improvement or transfer and experimental studies in learning. Prerequisite: Psychology 1A.
ring (3).

Comparative Education.

AULT

school systems of England, France, Germany and Denmark; traits of
les; origin and development of school systems; literacy of popula-
; traditional influences; characteristic types of schools and educa-
l procedures; governmental and private support; training of teachers.
upper division course open only to students who have had Educa-
1. A knowledge of History of Education desirable but not required.
II (3).

Comparative Education.

AULT

school systems of Austria, Russia, Mexico, Japan and China. Topics
treatment same as for Education 137.
upper division course open only to students who have had Educa-
1. A knowledge of History of Education desirable but not required.
ring (3).

Elementary Statistics.

BROOM

introductory study of the statistical measures and devices most
only used in connection with educational work. Data taken from
al school conditions. Opportunity given to obtain practice in the
f calculating machines and other aids to computation.
II (3).

Organization and Administration of Music Education.

L. D. SMITH

theory of the general principles of music administration; correlation
music with the various subjects in the public schools; music tests;
ve work. Prerequisites: Education 17 and 127.
ring (2).

Vocational Education.

WRIGHT

ns and objectives of vocational education of less than college grade.
ring (3).

Junior Business Training.

WRIGHT

e methods and content of the course in the elements of business
ng as offered in the junior high school.
ing (2).

Stenography.

AMSDEN

thods and content of courses in stenography.
ing (2).

Bookkeeping.

WRIGHT

ious types of bookkeeping method, with considerable study of content.
I (2).

165. Typewriting.

Methods in typewriting and office procedure.

Spring (2).

170. Visual Aids in Education.

Psychological principles underlying the use of visual aids in education; the sphere of the visual method; materials classified as visual aids; guiding principles in the selection of pictures and methods of using visual aids. Practical laboratory experience in the work of a supervisor in selecting, organizing, distributing, and evaluating visual aids and in making demonstrations to teachers; the care and operation of projectors and photographic laboratory equipment.

This course is given at the visual education center of the San Diego city schools and the enrollment is limited to students who have had previous arrangements with the head of the education department with the instructor.

Fall and Spring (2).

ENGLISH

Preparation for the pre-secondary major (lower division), required for the Junior certificate: English 1A-1B and six units from 56A-52A-52B. Recommended: A reading knowledge of German or French.

Pre-secondary major in English—Required: Thirty-six units in English of which not more than six may be in journalism and public speaking; not more than nine in composition. At least fifteen units in upper division courses must be completed in the junior and senior years.

LOWER DIVISION COURSES**1A-1B. Composition.**

ADAMS, BAGLEY, F. L. SMITH, WA

1A. A course in writing directed to a mastery of technical correctness and a training in the organization of material. 1B. Practice in effective writing based on extensive reading of modern literature.

A classification test in Subject A must be taken before admission.

Year course, beginning Fall and Spring (3-3).

4A-4B. Great Books.

OUT

A survey of books and bodies of literature that are significant sources of expressions of European and American culture. These include the Hebrew Bible, Greek Epic and Tragedy, Norse Eddas, and other literature of religious and communal character; and highly significant masterpieces of poetry and prose by great authors down to the nineteenth century.

Year course (3-3).

52A-52B. Types of Literature.

OUT

Semester I: Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems. Semester II: Introduction to the study of dramatic poetry and prose, the essay, novel and short story; elements, principles and characteristics; examples.

Year course (3-3).

56B. Survey of English Literature.

BAGLEY, ADAMS

The most important masterpieces of English literature from the Anglo-Saxon period through the Victorian age.

Spring course (3-3).

Periodical Literature.

WALKER

Current literature, in content and form, as presented by leading periodicals with the purpose of promoting intelligence and discrimination in dealing with immediate interest. Discussions and written papers dealing with contemporary essays, fiction and poetry.

UPPER DIVISION COURSES

1 Modern Prose Fiction.

OUTCAULT

Recent and contemporary fiction in drama, novel, and short story, beginning with Meredith and including the best British and American fiction of today.

Spring (3).

6-106B. Advanced Composition.

F. L. SMITH

A laboratory course in modern prose writing. Semester I: artistic narrative, with description. Semester II: The essay, the magazine article, criticism, the newspaper syndicate article. Outside readings. Prerequisite: One year of college composition.

Spring course (3-3). (Either semester may be taken first.)

7 Shakespeare.

OUTCAULT

Extensive reading of Shakespeare's plays, with special attention to a group of the comedies and another of the tragedies. Lectures and critical reports.

Fall (3).

8 Makers of Eighteenth Century Literature.

BAGLEY

Pope, Swift, Johnson, Goldsmith, Fielding, Burns, and their contemporaries as interpreters and teachers of their age.

Spring (3).

9 The Romantic Poets.

ADAMS

Study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

Fall (3).

10 Poetry of the Victorian Period.

WALKER

Study of Tennyson and Browning and their contemporaries and predecessors, relating English poetry to nineteenth century life and thought.

Spring (3).

11 Recent American Literature.

OUTCAULT

A survey of American literature with its backgrounds from the Civil War to the present time. Extensive reading in recent poetry, fiction, etc. Lectures, discussion, and reports.

Spring (3).

143. The Development of the English Novel.

WA

History of the English novel from the beginnings to Hardy. Extensive reading of novels with reports. Lectures and discussion.

Fall (3).

151. Mediaeval Literature.

BA

The literature of the fourteenth century, especially the verse romances and the poetry of Chaucer.

Fall (3).

160. Milton and Dryden.

A

Studies in the poetry of the seventeenth century, relating it to thought and the social life of the age.

Spring (3).

JOURNALISM

(See page 79)

SPEECH ARTS

(See page 93)

FOREIGN LANGUAGES

Preparation for the major in a foreign language (lower division) required for the Junior certificate: Sixteen units of credit in the language chosen for the major. Recommended: History 4A-4B.

Preparation for the pre-secondary group major in Romanic languages (lower division): French A-B, C-D, and Spanish A-B, C-D.

Pre-secondary group major (upper division): Eighteen upper division units in one language or twelve units in one language and six units in another.

The group major requirements are based on the assumption that the student will have taken courses in the high school equivalent to the college course in elementary French or Spanish. A student who offers matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for the third semester of the college course.

French**LOWER DIVISION COURSES****A-B. Elementary.**

CRAMER, PHILIP

Intensive study of French grammar and syntax; daily written exercises discussed in class; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to temporary prose writers; study of the principles of French prosody, memory work. Credit not given for French A unless followed by French B. Students who have had one year of French in high school should register for French A, but will receive only two units of credit. Students who have had two years of French in high school should register for French B, in which case they will receive four units of credit.

Year course (5-5).

D. Intermediate.

L. P. BROWN

Reading and composition; study of standard prose as a basis for class work; collateral reading with résumés and written reports in French; study of French prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences. Prerequisite: French B or three years of high school French, or its equivalent. Students with credit for four years of high school French, or its equivalent, should register French D.

Year course (3-3).

Scientific.

CRAMER

Readings taken from the fields of chemistry, physics, medicine, zoology, botany, etc. Outside readings of books and periodicals. Oral and written reports.

Fall (2).

UPPER DIVISION COURSES**A-101B. Conversation and Composition.**

E. M. BROWN

Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3).

A-102B. Introduction to French Classics.

E. M. BROWN

Selected works of Corneille, Racine, Moliere, and other writers of the seventeenth century. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1931-1932.)

A-105B. Modern French Drama.

E. M. BROWN

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brioux, Hervey, Maeterlinck, Rostand, and others read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1931-1932.)

A-109B. Survey of French Literature.

E. M. BROWN

A course intended to give a broad foundation for further study in French literature. The chief movements and writers from the sixteenth through the nineteenth centuries are studied, with selected readings. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1931-1932.)

German**LOWER DIVISION COURSES****B. Elementary.**

CRAMER

Pronunciation, reading and grammar, with practice in simple conversation, narration and description, both oral and written. Credit not given for German A unless followed by German B. Students who have had one year of German in high school should register for German A, and will receive only two units of credit. Those who have had two years

of German in high school should register for German B, in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

CRAMER

Reading and composition; study of standard prose as basis for class work; collateral reading with written reports; German conversation with the texts read as a basis; dictation. Prerequisite: German B or three years high school German, or its equivalent. Students with credit for four years high school German, or its equivalent, should enter German D.

Year course (3-3).

SC-SD. Scientific.

CRAMER

Fall semester. Readings in scientific reader on chemistry, physics, etc. occasional written reports on scientific subjects read outside of class; sight reading. Spring semester. Readings in special scientific or technical works; weekly written reports required; sight reading. Prerequisite: German SC-German B with a grade of C or three years of high school German; German SD-German C with a grade of C or four years of high school German.

Year course (2-2).

Latin

LOWER DIVISION COURSES

C. Ciceronian Prose.

M. V. JOHNSON

Reading in Latin and discussion of several of Cicero's orations; consideration of rhetorical devices and historical setting. Review of Latin syntax. Attention to comprehension of the meaning in the Latin order. Not open to students with credit for Cicero in high school. Prerequisite: Two years of high school Latin.

Fall (3).

D. Augustan Poetry.

M. V. JOHNSON

Reading in Latin of portions of Vergil's *Æneid*, with special attention to literary qualities, metrical form, and the relation of this poem to its time and to other epics. Artistic translation emphasized. Selection from Ovid possibly included. Not open to students with credit for Vergil in high school. Prerequisite: Latin C, or three years of high school Latin.

Spring (3).

Spanish

LOWER DIVISION COURSES

A-B. Elementary.

L. P. BROWN, PHILLIP

Intensive study of Spanish grammar and syntax, with daily written work; class drill in conversational idiom and pronunciation; reading with oral discussion and resúmenes; dictation; introduction to contemporary prose writers; study of the principles of Spanish prosody, with memorization work. Credit not given for Spanish A unless followed by Spanish B.

Students who have had one year of Spanish in high school should register for Spanish A, but will receive only two units of credit. Those who have had two years of Spanish in high school should register for Spanish B, in which case they will receive four units of credit.

Year course, beginning either Fall or Spring (5-5).

D. Intermediate.

PHILLIPS

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; a study of Spanish prosody, with selections for memorizing; dictation. Class work conducted mainly in Spanish. Individual conferences. Prerequisite: Spanish B or three years of high school Spanish, or its equivalent. Students with credit for four years of high school Spanish, or its equivalent, should enter Spanish D.

Year course (3-3).

UPPER DIVISION COURSES

A-101B. Conversation and Composition.

L. P. BROWN

Prerequisite: Spanish D, or its equivalent, with grade of C.

Year course (3-3).

A-102B. Introduction to Spanish Classics.

L. P. BROWN

Reading from several types of classical literature. Lazarillo de Tormes, and other novels of Roguery; one drama each from the works of Lope de Vega, Calderon, Alarcon, and Moreto; selections from Don Quixote, and the Cien Mejores Poesias Castellanas; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Not offered in 1931-1932.)

A-105B. Modern Spanish Drama.

L. P. BROWN

The development of the drama of Spain from the beginning of the sixteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3).

A-110B. Novel and Short Story in Spain.

L. P. BROWN

The development of the novel and short story in Spain from 1830 to present time: Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3).

General Language

LOWER DIVISION COURSE

Latin and Greek Word Derivation.

L. P. BROWN

A general and elementary course in philology. Latin and Greek roots of most frequent occurrence in English. Interrelations and development of meaning of the different words in English derived from the given roots. Open to freshmen.

Year course (2).

GEOGRAPHY

Preparation for the presecondary major in Geography (lower division) required also for the junior certificate: Geography 1 or 1A, 2 or 2A, 3 and Geology 1A. Recommended: A reading knowledge of French or German.

Presecondary major (upper division): Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

LOWER DIVISION COURSES

1, 1A. Introduction to Geography; Elements. CLARK, S.

The fundamental principles of geography, the distribution of life upon the earth and the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources and location and their relation to human activities. Open to all students.

Geography 1, Fall and Spring (3).

Geography 1A, Fall and Spring (2).

2, 2A. Introduction; Natural Regions and the Distribution of Population and of Cultures. CLARK, S.

The application of the fundamental principles of geography to various regions of the world. Comparison of regions with regard to different stages of development. Prerequisite: Geography 1 or 1A.

Geography 2, Fall and Spring (3).

Geography 2A, Fall and Spring (2).

3. Elementary Meteorology. BL

An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments, and records.

Fall and Spring (3).

UPPER DIVISION COURSES

113. Climatology. BL

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention given to the climate of different parts of the United States. Prerequisite: Geography 3.

(3) (Offered in summer session of 1931.)

116D. Geography of South America. CL

The climate, topography, and natural resources of the South American countries; the effect of those physical factors upon the economic, commercial, and racial problems of the different nations. Prerequisite: Geography 1 or 1A. Given alternate years.

Fall (3). (Not offered in 1931-1932.)

117A. Geography of Northwestern Europe. CL

The physical environment of each of the nations of the area and their reactions to physical environment in their political and social relations.

importance of the countries in manufactures. This course is planned to familiarize the student with modern European countries that he can read current periodical literature with understanding and interest. Prerequisite: Geography 1 or 1A.

Spring (3).

17B. Geography of the Mediterranean Area.

CLARK

A treatment of Southern Europe, Western Asia, and Northern Africa as a unit and a comparison of the land forms, climates, types of native vegetation, cultivated crops, industrial status, and present world position. Also the effect of geographic factors on the history of the area. Prerequisite: Geography 1 and 2.

(3) (Offered in summer session of 1931.)

18. Geography of North America.

CLARK

A study of the natural regions of North America, their formation and economic and historical development. Prerequisite: Geography 1 or 1A. Given alternate years.

Fall (3). (Not offered in 1932-1933).

19. Geography of Asia.

SUHL

A study of the cultural regions of Asia, their physical environment, and historical development. Prerequisite: Geography 1 or 1A.

Spring (3).

20A. Geography of the San Diego Area: Rural.

CLARK

Problems in land utilization. Independent regional field work required. Prerequisites: Geography 1, 2 and 3 and Geology 1A.

Fall (2).

20B. Geography of the San Diego Area: Urban.

SUHL

Problems in urban development. Prerequisites: Geography 1, 2 and Geology 1A.

Spring (2).

21A. Advanced Field Work.

CLARK, SUHL

Prerequisite: 135A or 135B.

Fall and Spring (2).

22. Economic Geography.

SUHL

A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 or 1A and 2 or 2A.

Fall (3).

GEOLOGY

LOWER DIVISION COURSE

23. General.

SUHL

Surface features of the earth, agencies and processes of change, and evolution of topographic forms.

Fall and Spring (3).

GERMAN

(See Foreign languages)

HEALTH AND PHYSICAL EDUCATION

(See Physical Education)

HISTORY

Preparation for the pre-secondary major in history (lower division) required also for the Junior certificate: History 4A-4B, 5A-5B, 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, Geography 1 and 2. No student shall enroll in more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-5B.

Pre-secondary major (upper division): Twenty-four units in upper division course in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199, in connection with which he will write a paper, the subject matter to be arranged in consultation with the instructor.

LOWER DIVISION COURSES**4A-4B. History of Modern Europe.**

LESL

Development of European society and institutions from about 1500 A. D. to the present time.

Year course (3-3).

5A-5B. History of England.

NASAT

The more important political, constitutional, and cultural phases of English development. The purpose of this course is to convey a good working knowledge of English history and to provide a survey of the part the Anglo-Saxon race has played in world history.

Year course (3-3).

8A-8B. History of the Americas.

NASAT

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis is placed on the process of planting European civilization in the new world, the international contest for the continents, the wars for independence, the development of the American republics, and their relations with each other and with the rest of the world. Based on H. E. Bolton's "Syllabus of the History of the Americas."

Year course (3-3).

UPPER DIVISION COURSES**111A-111B. Ancient History.**

LESL

Semester I: Social, economic, political and cultural development of the Greek states, with emphasis upon the growth of democracy, attempt at federal union, imperialism, and Hellenism. Semester II: Roman history from the earliest times to the beginning of the medieval period.

scussions of Roman imperialism and the main constitutional, economic, and religious developments in the republic and the empire.

Year course (3-3).

1A-121B. Medieval History.

LESLEY

General survey of European politics and the cultural development of the Middle Ages: the antecedents of the renaissance; development of medieval society and institutions, feudalism, the church, the universities, and intellectual tendencies. The rise of towns, of new nations, and of new thought, especially in the twelfth and thirteenth centuries. Period covers 500-1000 A. D.

Year course (3-3). (Not offered in 1931-1932.)

5A-145B. Europe Since 1789.

LESLEY

Revolutionary era; conflict of reaction and liberalism; development of nationalism, with special attention devoted to the unification of Germany and Italy; events leading up to the World War and contemporary problems of Europe resulting from that conflict.

Year course (3-3). (Not offered in 1931-1932.)

5A-146B. Diplomatic History of Europe.

LESLEY

European diplomatic and colonial policies since 1648, with detailed attention to the basic factors in international organization and procedure. During the second semester special emphasis upon the period 1870-1931. (Not credited for students with credit for History 151A-151B.)

Year course (3-3).

5A-156B. History of British Expansion.

NASATIR

A study of the growth, development, and break-up of the older overseas empire; the beginnings of the newer empire after 1783; the rise, federation, and imperial relations of the self-governing dominions; the crown colony system; India under British rule; and British expansion in Africa and the Pacific.

Year course (3-3).

1. South America Since Independence.

NASATIR

A study of the republics of South America. Attention directed to the development of nationality in South America, the struggles for political stability, the exploitation of resources, diplomatic and commercial relations with the United States, and other international problems of South America. Survey of present-day conditions, political, economic, and social.

Spring (3).

3. Mexico and the Caribbean Countries.

NASATIR

Same plan in general as outlined in History 161. Special attention to the relations of the United States with these countries, and to the recent developments in Mexico.

Fall (3).

1A-171B. The Rise of the American Nation.

LEONARD

Semester I. English colonization in North America and the development of colonial institutions and politics. Semester II. The revolutionary movement and the Revolutionary War; the establishment of the gov-

ernment under the constitution to about 1820. The completion of both semesters of this course meets the requirement on the United States Constitution, for graduation.

Year course (3-3). (Not offered in 1931-1932).

173A-173B. The Expansion of the United States.

LEON

The rise of Jacksonian Democracy; territorial expansion and the Mexican War; the slavery controversy, the Civil War, and reconstruction; the growth and progress of the United States to the World War. The completion of both semesters of this course meets the requirement on the United States Constitution, for graduation.

Year course (3-3).

199. Special Course for Advanced Students.

LEONA

Required of all students with a history major in the presecondary curriculum, and to be attended during the senior year. Other students interested in history may be admitted with the permission of the instructor.

Spring (2).

HYGIENE

LOWER DIVISION COURSES

N. B. See announcement on Health Education under Men's Physical Education.

2. Personal and Civic (Women).

TANN

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social hygiene in relation to the practical problems of young women and prospective homemakers. The laws and procedures in local civic health matters of particular interest to women studied in detail. Reports following personal investigation of at least three major topics required of each member, these reports being given and discussed before the class. Required of freshmen who are candidates for the Junior certificate or the degree in the presecondary curricula.

Fall and Spring (2).

INDUSTRIAL ARTS

LOWER DIVISION COURSES

3A. Mechanical Drawing.

NIC

Use and care of drafting instruments, lettering, orthographic projections, developments, intersections, tracings. Drafting room nine hours per week.

Fall and Spring (3).

21. Descriptive Geometry.

STOVA

Fundamental principles of descriptive geometry and their application to problems of engineering. Lectures and drafting. Prerequisite: Industrial Arts 3A, and sophomore standing.

Fall (3).

Machine Drawing.

STOVALL

Design and drawing of simple machine parts with emphasis upon the production of standard drawings. Lectures and drafting. Prerequisite: Industrial Arts 21.

Year course—Fall (1) Spring (4).

Materials of Construction.

STOVALL

Structural properties and adaptability of materials used in engineering. Open to sophomores.

Spring (2).

Elements of Electrical Engineering.

STOVALL

Mathematical and descriptive consideration of electrical circuits together with a general survey of the electrical industry. Lectures. Prerequisite: Mathematics 4A.

Spring (3).

Aerodynamics.

STOVALL

An elementary study of the fundamentals of aerodynamics, of the design and building of aeroplanes. Lectures. Open to sophomores.

Fall (3).

JOURNALISM

Preparation for the major in Journalism (lower division) required for junior certificate: History 4A-4B or 8A-8B, Psychology 1A-2B, Secretarial Training 2A, Political Science 1A-1B, Economics 1A-1B, English 1B, 52A-52B, Journalism 51A-51B. Recommended: English 60, Industrial Arts 1A-1B, Social Economics 50, Anthropology 50A-50B, Economics 18A-18B, Journalism 53A-53B.

The aim of the course in Journalism is to offer introductory training in the principles and practice of journalistic writing only after a good foundation in correct speaking and writing of English has been laid, to prepare for the necessarily broad field of the profession of Journalism by introductory work in as many of the fields of literature, history, physical science, social science, economics, the arts, etc., as is possible. Practical training in news reporting and editing for student publications for the daily press is emphasized.

LOWER DIVISION COURSES

Journalism 51A-51B. News Gathering and Reporting. F. L. SMITH

Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. Course planned for sophomores who have had English 1A-1B, with high school Journalism or equivalents.

Year course (3-3).

Journalism 53A-53B. Applied Journalism.

F. L. SMITH

Credit earned for editorial or other staff work throughout a full semester in student publications such as *The Aztec*, *El Palenque*, *Del Sudoeste*.

Fall and Spring (1 to 3-1 to 3).

UPPER DIVISION COURSES

Journalism 100. News and Manuscript Editing.

F. L. SM

Practice in copy reading, proof reading, headline writing and newspaper makeup. Study of editorial columns. Prerequisite: Journalism 51A or equivalent in composition.

Spring (3).

Journalism 153A-153B. Advanced Journalism Practice.

F. L. SM

Upper division work of the same type as that in 53A-53B, but with advanced requirements.

Fall and Spring (1 to 3-1 to 3).

NOTE.—Not more than six units in all will be given for journalism practice on student publications.

Latin

(See Foreign Languages)

MATHEMATICS

Preparation for the major (lower division) required for the junior certificate: Mathematics 3A-3B, 7A-7B, and 9 or equivalent. Recommended: Physics, astronomy, and a reading knowledge of French or German.

LOWER DIVISION COURSES

C. Plane Trigonometry.

Right and oblique triangles; logarithms and slide rule; identities and equations. Prerequisites: Plane geometry and one and one-half years of high school algebra.

Spring (3). (Not offered in 1931-1932; included in 7A.)

1A-1B. Elementary Functions.

Algebra, numerical trigonometry, functions and graphs, introduction to calculus, with emphasis on applications. Prerequisites: Elementary algebra and geometry in high school.

Year course (4-4).

2. Mathematics of Investment.

WRI

Interest and annuities; amortization; sinking funds; valuation of bonds; depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Plane trigonometry and two years of high school algebra, or equivalent.

Fall (3).

3A-3B. Analytic Geometry and Calculus.

GLEA

Analytic geometry and differential calculus, together with an introduction to the integral calculus. Prerequisites: Trigonometry, plane and solid geometry, and two years of algebra in the high school.

Year course (3-3).

4-4B. Analytic Geometry and Calculus—Higher Course. STOVALL

Analytic geometry, both plane and solid; calculus, both differential and integral with special emphasis on their practical use in engineering work. Prerequisite: Mathematics 3A-3B, with grade of C or better.

Year course (3-3).

4-7B. Introduction to Analysis.

LIVINGSTON

Trigonometry, analytic geometry, differential calculus, introduction to integral calculus. Prerequisites: Plane geometry and two years of high school algebra.

Year course (4-4).

College Algebra.

Rapid review of elementary algebra, followed by logarithms, progressions and series, permutations and combinations, probability, theory of equations. Prerequisites: Plane geometry, one and one-half or two years high school algebra.

Spring (3).

Integral Calculus.

LIVINGSTON

The technic of integration with applications. Prerequisite: Mathematics 3A-3B or 7A-7B.

Fall (3).

UPPER DIVISION COURSES

1. Elementary Geometry for Advanced Students.

LIVINGSTON

Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry, and calculus.

Fall (3).

2. Elementary Algebra for Advanced Students.

LIVINGSTON

Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry and calculus.

Spring (3).

3. History of Mathematics.

GLEASON

A nontechnical course open to students who have some knowledge of fundamental ideas of mathematics.

Fall (3).

4. Modern Geometry.

GLEASON

The geometry of the circle and the triangle. Prerequisite: Mathematics 1A-1B, 3A or 7A.

Fall (3). (Not offered in 1931-1932.)

5. Projective Geometry.

GLEASON

The construction and study of conic sections by means of perspectives, poles and polars, and involutions. Prerequisite: Mathematics 105, or permission of the instructor.

Spring (3). (Not offered in 1931-1932.)

108A. Instrumentation.

BEIDLE

Theory and practice of arranging music for instrumental combination.
Prerequisite: 4A-4B.

Spring (2).

109A-109B. Violin Class Principles.

BEIDLE

Methods and materials for teaching violin in classes. Prerequisite: least some playing ability on the violin.

Year course (1-1).

110A-110B. Piano Class Principles.

SPRING

Materials and methods used in piano classes in the elementary school.
Prerequisite: At least two years of piano lessons.

Year course (1-1).

119A-B-C-D. Instrumental Ensemble.

BEIDLE

(See 19A-B-C-D)

120A-B-C-D. Vocal Ensemble and Chorus.

L. D. S.

(See 20A-B-C-D)

MUSICAL ORGANIZATIONS**11A-11B or 111A-111B. Treble Clef (Women's) Glee Club.**

L. D. S.

11C-11D or 111C-111D. (Second Year)

Membership based on competitive try-outs.

Year course, beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

12A-12B or 112A-112B. Men's Glee Club.

BEIDLE

12C-12D or 112C-112D. (Second Year)

Membership based on competitive try-outs.

Year course, beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

13A-13B or 113A-113B. Orchestra.

BEIDLE

13C-13D or 113C-113D. (Second Year)

Year course, beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

Applied Music

(Credit for applied music is available only for students majoring in music, and is subject to special permission and arrangement.)

15A-15B or 115A-115B. Stringed Instruments.**15C-15D or 115C-115D. (Second Year)****16A-16B or 116A-116B. Wind Instruments.****16C-16D or 116C-116D. (Second Year)****17A-17B or 117A-117B. Voice.****17C-17D or 117C-117D. (Second Year)****18A-18B or 118A-118B. Piano. (Pipe Organ)****18C-18D or 118C-118D. (Second Year)**

PHILOSOPHY

LOWER DIVISION COURSE

5B. Introduction.

STEINMETZ

Semester I: Elementary orientation; the Republic of Plato; the permanent problems of philosophy. Semester II: The problems of philosophy emphasized according to related sciences; the philosophy of science. See lectures a week and periodical section meetings. Prerequisite: former course (3-3).

PHYSICAL EDUCATION

MEN'S DEPARTMENT

A three-hour activity course each semester is required for the two years of the lower division. A medical examination is given each student when entering and the work is fitted, as far as possible, to his needs. Physical efficiency tests are given at the beginning in order to classify the student according to his physical ability. These are repeated at the beginning of the succeeding semesters in order to note improvement and to arrange the course of program so as to acquire all-round development. The content of the required two years is planned to give each student fundamental training in those sports which have carry-over value into after life. Opportunity is given all students to take part in the regular competitive sports program.

Health Education—As a part of the physical education requirement each student during one term of his freshman year is registered in a course in hygiene which is designed to increase productivity in his chosen profession and to enable him to achieve greater efficiency in his college work. During the term it is taken, only two hours of physical activity a week are required, the other hour being taken up by health education. Students with individual health problems are urged to consult with the instructor in charge of health education.

LOWER DIVISION COURSES

(Freshman year.) Self-defense and track and field fundamentals.

Fall (1).

Tennis, swimming and golf.

Spring (1).

(Sophomore year.) Instruction and competition in handball, basketball and speedball.

Fall (1).

Instruction and competition in volley ball, baseball and track.

Spring (1).

For B. Golf. Spring ($\frac{1}{2}$).

For B. Track. Spring ($\frac{1}{2}$).

For B. Baseball. Spring ($\frac{1}{2}$).

PHYSICAL EDUCATION

WOMEN'S DEPARTMENT

All new students are given a medical examination to the end that the physical needs of each student may be determined and her class work planned accordingly. Two hours weekly of directed physical activity are required in freshman and sophomore years. Emphasis is upon rhythmic activities, games and sports.

LOWER DIVISION COURSES

52A. Formalized Activities and Group Games.

RAY

Fall and Spring ($\frac{1}{2}$).

52B. Stunts and Apparatus.

RAY

Fall and Spring ($\frac{1}{2}$).

52C. Athletic Games and Sports.

RAY

Fall and Spring ($\frac{1}{2}$).

52D. Rhythmical Activities.

RAY

Fall and Spring ($\frac{1}{2}$).

52. Game Activities.

TANNER

Games suitable for large or small groups in elementary and junior high schools are studied and played, including rhythmic activities, games of low organization, and modified athletic games. Required for the elementary school credential instead of 52C.

Fall and Spring ($\frac{1}{2}$).

53. Administration of Physical Education.

TANNER

Physical education problems, administration of tests, methods of classifying children for play activities, developing leaders, and carrying on intramural ideals. Particular attention is given posture problems. The content and administration of the state program in physical education form the basis of the course.

Fall and Spring (2).

55. Swimming.

Required of all freshmen women majoring in physical education.

($\frac{1}{2}$).

56. Tennis.

Required of all sophomore women majoring in physical education. Tests given on playing skills and knowledge of teaching technique.

($\frac{1}{2}$).

UPPER DIVISION COURSES

102. Emergency and Safety Program.

TANNER

Means by which the number of accidents, especially among children, may be reduced on street, playground, or at home; practical application of first aid methods. Of value to classroom teachers as well as to specialists in physical education.

(1).

I. Health Education.

TANNER

A course for teacher-training students which includes the study of the causes, common physical defects, and health indices of school children; detection and control of communicable diseases which may appear in school; and the elements which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation. Fall and Spring (2).

. Applied Anatomy.

(See Men's Department.)

2).

A-B. Sports Methods.

RAW

Practice for skill, study of rules, and of coaching methods. Prerequisite: Reason's experience in at least four of the following sports—volley ball, basketball, hockey, speedball, soccer, baseball, tennis, and track activities. Year course (2-2).

Stunts and Tumbling.

RAW

A practical course in personal technique. Progressive series of individual, dual, and group stunts, including simple pyramids.

1).

Formalized Activities.

TANNER

The scientific adaptation of formalized exercises to individuals and to groups; an activity and methods class with opportunity for supervised practice teaching; elementary exercises on apparatus.

2).

Folk Dancing.

RAW

A series of folk and national dances for elementary and junior high schools. Emphasis is placed on methods of presentation as well as upon ability to execute the various dances. Note books are required.

3).

Dancing.

RAW

An introductory course to the fields of interpretative, character, and tap dancing. Particularly adapted to meet needs of prospective physical education teachers.

4).

Physiology of Exercise.

5).

Recreational Leadership.

TANNER AND STAFF

Fundamentals of recreational leadership developed by instruction in camp craft, camp fire lore, girl reserve activities, the study of school recreational needs and facilities, and of civic recreation.

6).

UPPER DIVISION COURSES

101. American Institutions.

LEONAR

Origins and principles of the United States Constitution, and a survey of the political institutions which have developed under it.

Prescribed by the state law for all candidates for the bachelor's degree. Enrollment is limited to juniors and seniors, except with the consent of the instructor. Those taking History 171A-171B, 173A-173B or Political Science 113 are excused from this requirement. Attention is called to the fact that this course is offered only during the Fall semester.

Fall (2).

111. Theory of the State.

LEONAR

The nature of the state, its organization and activities, and its relation to individuals and to other states.

(Fall (3)).

113. American Political Ideals.

LEONAR

Underlying theories and principles of American governmental policy. Meets the requirement on the United States Constitution for graduation.

Spring (3).

PSYCHOLOGY

Preparation for the major in Psychology (lower division) required for the Junior certificate: Required: Psychology 1A and 1B, Zoology 1A-1B or Biology 10A-10B. Recommended: French, German, chemistry physics.

LOWER DIVISION COURSES

1A. General.

STEINMETZ, BEL

An introductory survey of the entire field of psychology. In the study of normal adult human behavior, and the factors which condition it, a conservative position is taken, leaving the student as nearly as possible unbiased toward the special schools of psychology. Prerequisite to all courses in Psychology. Not open to Freshmen, but to Sophomores without prerequisite. Not credited for students who have already earned credit for Psychology 2A.

Fall and Spring (3).

1B. General.

STEINMETZ, BEL

An extensive and intensive study of the entire field of adult human behavior. Experimental work and survey of leading schools of psychology. Prerequisite: Psychology 1A.

Spring (3).

2B. Applied.

BELL

A general survey of the results of modern psychology applied to self improvement, and to the work of the lawyer, physician, clergyman, merchant, and educator. The purpose of the course is to give intelligent basis for discrimination in these fields between scientific, legitimate psychology and the pseudo-psychology that is popular because of its

simplicity and plausibility or because of its mysticism. Prerequisite: Psychology 1A.

Spring (3).

UPPER DIVISION COURSES

102c. Genetic—Growth and Development of the Child.

BELL, STEINMETZ

The mental and physical growth and development of the child. Special emphasis given to norms of structure and function as a basis for an interpretation of variations from them. Behavior problems and the growth of personality traits and conditioning factors of physical and mental hygiene. An intensive study of one child presenting a problem of physical or mental maladjustment made by each student. Case study technique included. Prerequisite: Psychology 1A and Education 108 taken previously or at the same time.

Fall and Spring (3).

105. Clinical (Mental Testing).

BELL

A brief review of the history and rationale of intelligence testing, followed by a discussion of the Stanford revision of the Binet-Simon test, with demonstration and practice. The best group tests of intelligence discussed and demonstrated. Experience in giving, scoring and interpreting results. The purpose of this course is to give teachers information on the subject, to enable each student to find out if by inclination and endowment he is fitted to do scientific testing and to put him in the way of becoming skilled in giving and interpreting intelligence tests. Prerequisites: Psychology 1A, Education 108. Recommended: Psychology 102C and Education 140.

(3).

115. Social.

BELL

The instinctive and reflective side of man, and his adjustments to civilization. Personality, suggestion and imitation, leadership, the crowd, public opinion, social control, etc. Prerequisite: Psychology 1A. (2-3). (Offered in summer session of 1931).

Educational Psychology

(See Education)

Secretarial Training

(See Economics)

Social Economics

(See Economics)

Spanish

(See Foreign Languages)

SPEECH ARTS

Preparation for the major in Speech Arts (lower division) required for the Junior certificate: Speech Arts 1A-1B, Speech Arts 3A and 5A or Speech Arts 55A-55B.

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Bulletin

San Diego State Teachers College

— AND —

Announcement of Courses

1932-1933



June, 1932

CALIFORNIA STATE PRINTING OFFICE
HARRY HAMMOND, STATE PRINTER
SACRAMENTO, 1932

State Teachers College of San Diego

Volume Twenty

JUNE, 1932

No. 2

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

STATE DEPARTMENT OF EDUCATION

ERLING KERSEY.....Superintendent of Public Instruction
ex officio Director of Education
H. COHN.....Deputy Director of Education

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Published Quarterly by the State Teachers College of San Diego,
SAN DIEGO, CALIFORNIA

CALENDAR 1932-1933

SUMMER SESSIONS, 1932.

- Term IA, six weeks, June 27-August 5.
 Term IB, ten weeks, June 27-August 30.
 Term II, four weeks, August 8-August 30.

FALL SEMESTER, 1932-1933.

- | | | |
|-----------|--------|--|
| September | 6, | 8.00 a.m., College Aptitude Test.* |
| September | 6, | 1.30 p.m., Assembly of New Students. |
| September | 6, | 9.00-12.00 a.m. and 1.00-3.00 p.m., Payment of Fees by Students Who Preregistered |
| September | 7, | 8.30 a.m., Examination in Subject A (English Composition). |
| September | 7, | 1.30 p.m., Fundamentals Test.* |
| September | 7, | 8.30-12.00 a.m., Entrance Examination in Mathematics (by Appointment).† |
| September | 7, | 8.30-12.00 a.m., Registration of Old Students |
| September | 7, | 8.30-12.00 a.m. and 1.00-3.00 p. m., Payment of Fees by Students Who Preregistered |
| September | 8, | 8.30-12.00 a.m., Registration of New Students with Clear Admission. |
| September | 9, | 8.30-12.00 a.m., Registration of New Students with Provisional Admission. |
| September | 12, | Class Work Begins. |
| November | 11, | Legal Holiday. |
| November | 24-27, | Thanksgiving Recess. |
| December | 17, | Christmas Recess Begins. |
| January | 3, | Class Work Resumes. |
| January | 23-27, | Mid-Year Examinations. |

SPRING SEMESTER, 1933.

- | | | |
|----------|------|---|
| January | 28, | 8.00 a.m., College Aptitude Test.* |
| February | 2-6, | Mid-Year Registration Period. |
| February | 2, | 9.00-12.00 a.m. and 1.00-3.00 p. m., Payment of Fees by Students Who Preregistered. |
| February | 3, | 8.30-12.00 a.m., Registration of Old Students |
| February | 3, | 8.30-12.00 a.m. and 1.00-3.00 p.m., Payment of Fees by Students Who Preregistered |
| February | 3, | 8.30-12.00 a.m., Entrance Examination in Mathematics (by Appointment).† |
| February | 4, | 8.30 a.m., Examination in Subject A (English Composition). |
| February | 4, | 10.30 a.m., Assembly of New Students. |
| February | 4, | 1.00 p.m., Fundamentals Test.* |

* See page 19.

† See page 38.

February	6, 8.30-12.00 a.m. and 1.00-2.00 p.m., Registration of New Students.
February	7, Class Work Begins
April	8-16, Easter Recess.
May	1, Dedication Day.
May	30, Memorial Day.
June	8-14, Final Examinations.
June	15, Annual Commencement Exercises.

MER SESSIONS, 1933.

- Term IA, six weeks, June 26-August 4.
- Term IB, ten weeks, June 26-August 29.
- Term II, four weeks, August 7-August 29.

FACULTY

- EDWARD L. HARDY, LL.D., President SCHOOL ADMINISTRATOR
 B.L., University of Wisconsin; M.A., University of Chicago; LL.D., La Verne College.
 Study of European secondary schools.
 Principal of San Diego High School. (Appointed September, 1910)
- IRVING E. OUTCALT, M.A. VICE PRESIDENT AND PROFESSOR OF ENGLISH
 A.B., M.A., Stanford University.
 Student, University of Illinois; graduate study and research at Stanford University, Travel in Europe.
 Head of Department of English, San Diego High School.
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- J. W. AULT, M.A. DEAN AND PROFESSOR OF EDUCATION
 B.S., Valparaiso University; M. A., University of South Dakota
 Student, Miami University; graduate student, University of Iowa
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 Superintendent of city schools; conductor and instructor in teacher institutes; Professor of Education at Southern State Teachers College, Springfield, South Dakota.
 (Appointed September, 1910)
- ARTHUR G. PETERSON, M.A. DEAN OF LIBERAL ARTS, EX OFFICIO
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 A.B., College of the Pacific; M.A., Stanford University.
 Graduate student, University of Southern California.
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 (Appointed September, 1910)
- CHARLES E. PETERSON, A.B. DEAN OF MEN AND ASSOCIATE PROFESSOR
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 Student, Oregon Agricultural College, University of California; two years under Robert Krohn; graduate student, Claremont College.
 Director of Playgrounds, Portland, Oregon; Director of Physical Education, Y. M. C. A.; Physical Education and Recreation work at the United States Army Camp; Director of Physical Education at Junior High School, Berkeley, California. (Appointed July, 1912)
- JOHN R. ADAMS, M.A. ASSISTANT PROFESSOR OF ENGLISH
 A.B., M.A., University of Michigan.
 Graduate student, University of Southern California.
 Instructor in Rhetoric, University of Michigan; Associate in English, University of Washington.
 (Appointed September, 1912)
- GEORGIA C. AMSDEN ASSOCIATE PROFESSOR OF COMPOSITION
 Gregg School, Chicago; special secretarial training in various institutions; University of California summer session and extension division work.
 Teacher in University of California summer school; Traveling Representative and Secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, France; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant Editor and Reporter, Daily Press, Detroit, Michigan; Instructor, San Diego High School.
 (Appointed September, 1912)

NIVERE KOTTER BACON, M.A. TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION

B.S., Utah Agricultural College; M.A., Stanford University.
Graduate student, Stanford University; University of California;
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Teacher in Public Schools; Primary Supervisor.
(Appointed July, 1928.)

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A.B., University of Michigan; A.M., University of California.
Graduate student, University of Illinois and Columbia University.
Head of Department of English, State Normal School, Oshkosh,
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(Appointed September, 1921.)

7. BAIRD, M.A. PROFESSOR OF PHYSICS

A.B., University of Wisconsin; M.A., University of California.
Graduate student, University of Minnesota.
Head of Science Department, University of Wisconsin High School
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Department, University of Washington, Seattle.
(Appointed September, 1921.)

D BEIDLEMAN, B.Mus. ASSOCIATE PROFESSOR OF MUSIC

B.S., B.Mus., Columbia University.
Teacher of Music, Boys High School, Brooklyn, N. Y.; Instructor,
Columbia University; Head of Violin Department, University of Illinois;
Assistant Professor of Music, University of North Dakota; Professor
of Music and Director of the Conservatory, College of Puget
Sound.
(Appointed September, 1927.)

TRUDE SUMPTION BELL, M.A. PROFESSOR OF PSYCHOLOGY

A.B., Indiana University; M.A., Stanford University.
Graduate, Indiana State Normal School; Research Work, Clark
University. Travel in Europe.
Assistant in Education and Director of Practice Teaching, University
of Colorado; State Institute Lecturer, Montana; Instructor, School
of Education, Indiana University.
(Appointed August, 1916.)

Y BENTON ASSOCIATE PROFESSOR OF ART

Student, Rosemont Dezaley, Lausanne, Switzerland; Chicago Art
Institute; New York School of Art; Teachers College, Columbia University;
pupil of W. J. Whittemore, miniature painter, and of Sara
Tuttenworth, craftsman.
(Appointed July, 1916.)

A CRON BOREN, A.B. INSTRUCTOR IN ART

A.B., State Teachers College of San Diego.
Graduate, Kansas State Normal School, Emporia. Student, University
of Chicago; State Teachers College of Pittsburg, Kansas;
Massachusetts Institute of Technology; Stout Institute.
Teacher in rural and city schools in Kansas and Pennsylvania;
Supervisor of Manual Arts, city schools of Emporia, Kansas; Professor
of Manual Arts and Director of Department, College of Industrial
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(Appointed September, 1930.)

OR BROOKS, B.A. INSTRUCTOR IN GEOGRAPHY

B.A., Stanford University.
Graduate student, University of Arizona; Harvard University;
Stanford University; Stanford University. Travel in Europe.
Member of staff, Yosemite Field School of Natural History; Summer
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(Appointed September, 1931.)

- M. EUSTACE BROOM, Ph.D. ASSOCIATE PROFESSOR OF EDUCATION
A.B., M.A., University of Illinois; Ph.D., University of Southern California.
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Assistant in Psychology, University of Illinois; Teacher, School, Elizabeth, Illinois; Superintendent of Schools, Scales M. Illinois, and Bramwell, West Virginia; Instructor in Education, Extension Division, Concord State Normal School, West Virginia; Teacher, Francis W. Parker School of San Diego; Lecturer and Visiting Assistant Professor of Education, University of Southern California; Visiting Assistant Professor of Education (summer session), George Washington University; Associate Editor, The High School Teacher.
(Appointed February, 1911)
- LESLIE P. BROWN, M.A. ASSOCIATE PROFESSOR OF SPANISH
A.B., Yale University; M.A., Harvard University.
Instructor in French and Spanish, Northwestern University; Instructor, Harvard University; University of North Carolina; University of Chicago.
(Appointed July, 1911)
- ROY E. CAMERON, Ph.D. ASSISTANT PROFESSOR OF ECONOMICS
A.B., Ph.D., University of California.
Student, Creighton University.
Professor of Economics, University of Omaha; Teaching Fellow in Economics, University of California. (Appointed September, 1911)
- VINNIE B. CLARK, A.B. ASSOCIATE PROFESSOR OF GEOGRAPHY
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- KATHERINE E. CORBETT, A.M. TRAINING SUPERVISOR AND ASSISTANT PROFESSOR OF EDUCATION
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Graduate Public School Music Course, Ypsilanti Conservatory of Music.
Teacher in Public Schools, Ypsilanti, Michigan; Training Supervisor, Kent State Normal College, Ohio; Evening High School, San Francisco.
(Appointed July, 1911)
- J. GRANT CRAMER, M.A. ASSOCIATE PROFESSOR OF MODERN LANGUAGES
A.B., M.A., New York University.
Student, Columbia Law School; University of Leipzig, Germany.
Twenty years residence, travel, and study in Europe.
Instructor, French and German, Lehigh University, Bethlehem, Pennsylvania; Associate Professor, Modern Language Department, Boston University; Captain of Infantry, United States Army, Military Intelligence Division.
(Appointed September, 1911)
- ERBY CHESTER DEPUTY, Ph.D. ASSISTANT PROFESSOR OF EDUCATION
A.B., University of Denver; A.M., Ph.D., Columbia University.
Graduate student, University of Southern California.
Teacher in rural schools and principal of high schools, Indiana; Assistant Professor, University of Arkansas and Kansas State Teachers College.
(Appointed September, 1911)
- JOHN MORTIMER GLEASON, M.A. INSTRUCTOR IN MATHEMATICS AND PHYSICS
A.B., M.A., University of California.
Student, Hope College, University of Michigan, and University of Southern California.
Teaching Fellow in Mathematics, University of California.
(Appointed September, 1911)

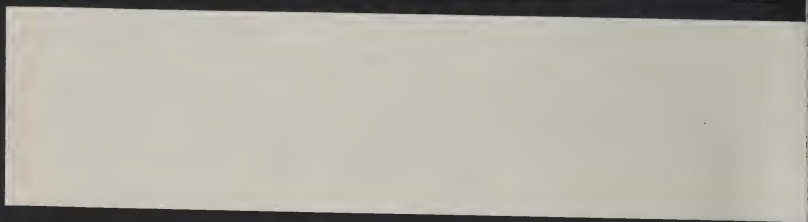
ERT D. HARWOOD, PH.D.

ASSOCIATE PROFESSOR OF ZOOLOGY

B.A., Pomona College; Ph.D., Cornell University.

Assistant in Biology, Cornell University; Field Entomologist, Natural Survey of Illinois; Teacher, Kern County Union High School and Junior College, Bakersfield; Assistant in Entomology, Cornell University; Stream Survey, Conservation Department, New York.

(Appointed September, 1928.)



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Teacher, Chula Vista Grammar School; Basket Ball Coach, U. S.
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Graduate of State Normal School of San Diego; graduate student,
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Public School Teacher. (Appointed February, 1911.)

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Graduate student, Scripps Institute for Biological Research, La
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Public School Teacher. (Appointed September, 1924.)

ALTER B. HERREID, A.B. ASSISTANT PROFESSOR OF PHYSICAL
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A.B., Washington State College.
Graduate student, University of California and University of South-
ern California.
Freshman Football Coach, Washington State College; Director of
Physical Education, Aberdeen High School, Aberdeen, Washington;
Director of Physical Education, Santa Maria Union High School;
Coach, Huntington Park Union High School.
(Appointed September, 1930.)

VERETT GEE JACKSON, A.B. INSTRUCTOR IN ART

A.B., State Teachers College of San Diego.
Student, Agricultural and Mechanical College of Texas; Art Insti-
tute of Chicago.
Associate Professor, Sul Ross Teachers College, Alpine, Texas;
Instructor, Academy of Fine Arts, San Diego; painter.
(Appointed November, 1930.)

ARGUERITE VEASEY JOHNSON, A.M. REGISTRAR AND ASSOCIATE
PROFESSOR OF LATIN

A.B., Radcliffe College; A.M., Columbia University.
Teacher of Latin, History and French; Assistant in the Registrar's
Office, Teachers College, Columbia University. (Appointed July, 1927.)

RTLE ELIZABETH JOHNSON, PH.D. PROFESSOR OF BIOLOGY

B.S., M.S., Ph.D., University of California.
Research Assistant, Scripps Institute for Biological Research, La
Jolla; Instructor, Pasadena High School. (Appointed September, 1921.)

BIL ELIZA JONES, M.L. ASSISTANT PROFESSOR OF ENGLISH

B.L., M.L., University of California.
Director, Junior Players of Pasadena Community Playhouse; Drama
Instructor in Chouinard Art School, Los Angeles; Organizing Secretary
and Instructor in Play Writing of Summer Art Colony at Pasadena
Community Playhouse; Drama Organizer and Director of San Diego
Community Service. (Appointed September, 1925.)

ENEVIEVE KELLY, A.M. INSTRUCTOR IN SOCIOLOGY

A.B., University of California; A.M., Columbia University.
Student, Los Angeles Public Library School. Graduate student,
University of Chicago. Travel in Europe.
Teacher, Corcoran Union High School. Librarian, Northern Arizona
Normal School, Flagstaff; Scripps Foundation for Research in Popu-
lation Problems, Oxford, Ohio. (Appointed September, 1924.)

MARJORIE KELLY, A.B.

INSTRUCTOR IN A

A.B., University of California at Los Angeles.
Pupil, in Paris, of Andre Lhote, Painter, and of Mme. Alexandre
Exter, Russian Stage Designer.
Instructor in Fine Art, Pasadena Junior High School.

(Appointed September, 1922)

CHARLES B. LEONARD, Ph.D.

PROFESSOR OF HISTO

A.B., M.A., Ph.D., University of California.
Instructor in History, Lowell High School, San Francisco; Teach
Fellow in History, University of California.

(Appointed September, 1922)

LEWIS B. LESLEY, M.A.

ASSOCIATE PROFESSOR OF HISTO

A.B., Stanford University; M.A., University of California.
Native Sons' Traveling Fellow in Europe from University of Ca
fornia.

Instructor, Principia School, St. Louis, Missouri; Teaching Fell
in History, University of California; Acting Assistant Professor
American History, Pomona College. Summer session staff, Claremont
Colleges.

(Appointed September, 1922)

GEORGE R. LIVINGSTON, M.A. ASSOCIATE PROFESSOR OF MATHEMATICS

B.S., M.A., University of California.
Instructor, San Diego Junior College; Head of Department
Mathematics, Santa Barbara Junior College.

(Appointed September, 1922)

ELMER ALLEN MESSNER, M.A.

INSTRUCTOR IN CHEMIS

A.B., M.A., Stanford University.
Student, Marquette University, Milwaukee, Wisconsin; State Tea
chers College of San Diego. Registered Assistant Pharmacist, State
Wisconsin; Licentiate in Pharmacy, State of California. Gradu
Student, University of Breslau, Germany.

(Appointed September, 1922)

CHESNEY RUDOLPH MOE, M.A.

INSTRUCTOR IN PHYS

A.B., M.A., Stanford University.
Student, State Teachers College of San Diego.

(Appointed September, 1922)

ABRAHAM P. NASATIR, Ph.D.

ASSISTANT PROFESSOR OF HISTO

A.B., M.A., Ph.D., University of California.
Native Sons' Traveling Fellow in History in Europe.
Assistant Teaching Fellow in History, University of Californ
Instructor in History, State University of Iowa.

(Appointed January, 1922)

WILLIAM L. NIDA, M.A.

PROFESSOR OF EDUCATION, SUPERVISOR
PUBLIC SCHOOL PRACTICE TEACHING

Ph.B., Ohio State University; M.A., University of Southern Cal
fornia.
Graduate student, University of Chicago.
Principal of Ohio High Schools; Superintendent of Schools in Ill
inois; Supervisor, Junior High School, San Diego.

(Appointed July, 1922)

PAUL LEWIS PFAFF, B.A.

INSTRUCTOR IN ENGL

B.A., Stanford University.
Student, State Teachers College of San Diego; graduate student
Claremont Colleges.

(Appointed September, 1922)

WALTER T. PHILLIPS, M.A.

ASSISTANT PROFESSOR OF SPAN
AND FRENCH

A.B., University of Washington; M.A., Stanford University.
Student, National University of Mexico, Travel in Mexico.
Teaching Assistant in Spanish and graduate scholarship in Span
Stanford University; Assistant Professor of Modern Languages, V
lamette University.

(Appointed September, 1922)

ICE M. RAW, A.B. ASSISTANT PROFESSOR OF PHYSICAL EDUCATION
A. B., University of Southern California.
Graduate student, University of Southern California. Travel in Europe.
(Appointed September, 1923.)

BEL M. RICHARDS, A.M. TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION
B.S., A.M., University of Missouri.
Graduate student, University of Southern California.
Rural, City and High School Teacher; City Superintendent of Schools; Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College.
(Appointed September, 1921.)

OLEY H. ROBINSON, B.Sc. ASSISTANT PROFESSOR OF CHEMISTRY
B.Sc. in Sugar Engineering, University of Louisiana.
Chemist, University of Louisiana Sugar House; Raceland Sugar Factory; State Sugar House, Louisiana; Research Chemist, Thornley and Company; Chief Chemist, Pacific Marine Chemicals, Inc.
(Appointed September, 1928.)

NCER L. ROGERS, A.M. INSTRUCTOR IN ANTHROPOLOGY
AND ENGLISH
A.B., State Teachers College of San Diego; A.M., Claremont Colleges.
Student in Archaeology, School of American Research, Santa Fe, New Mexico.
Curator in Anthropology, San Diego Museum.
(Appointed September, 1930.)

SKILLING, M.S. PROFESSOR OF ASTRONOMY
B.S., M.S., University of California.
Student, State Normal School, Los Angeles; Stanford University.
Teacher, Los Angeles County and City public schools; Assistant in Physics, University of California.
(Appointed September, 1901.)

RENCE L. SMITH, M.A. ASSOCIATE PROFESSOR OF ENGLISH
A.B., Northwestern University; M.A., University of Chicago.
Graduate student, Medill School of Journalism, Chicago.
Instructor, State Normal School, Oshkosh, Wisconsin.
(Appointed July, 1917.)

EBORAH SMITH, A.M. ASSOCIATE PROFESSOR OF MUSIC
Mus.B., A. B., Oberlin College; A.M., Columbia University.
Graduate student, Stanford University.
Head of Department of Music, State Teachers College, Winona, Minnesota.
(Appointed September, 1922.)

IAN PEEK SMOOR, A.M. TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION
A.B., A.M., Stanford University.
Travel in Europe.
Teacher in Public Schools; Assistant in History, Stanford University; Dean of Women, State Normal School, Cheney, Washington; Instructor, Francis W. Parker School, San Diego, California.
(Appointed September, 1923.)

ISTINE SPRINGSTON, B.M. INSTRUCTOR IN MUSIC
B.A., B.M., University of Redlands.
Graduate student, University of Redlands and University of Southern California; student in piano with A. E. Guerue of St. Louis and Olga Steeb of Los Angeles. "Diploma of Execution," Conservatoire Americain, Fontainebleau, France.
Supervisor of Music, Needles, California; Assistant in Piano, Organ and Theory, University of Redlands; Instructor, San Diego High School.
(Appointed September, 1930.)

HARRY C. STEINMETZ, A.M. ASSISTANT PROFESSOR OF PSYCHOLOGY
A.B., University of California; A.M., University of Southern California.

Assistant in Journalism, University of the Philippines, Manila.
Assistant in Educational Psychology, University of California; Instructor, Glendale Union High School and San Mateo Junior College.
(Appointed September, 1919.)

JOHN PAUL STONE, M.S., in Library Science LIBRARIAN
B.S., Northwest Missouri State Teachers College; M.S., University of Illinois Library School.

Instructor in English and Public Speaking, Senior High School, Joplin, Missouri; library work, University of Illinois Library; Instructor of Library Science, Louisiana State Teachers College.
(Appointed September, 1919.)

ALVENA SUHL, M.A. ASSISTANT PROFESSOR OF GEOGRAPHY
A.B., M.A., University of California.
Teaching Fellow, University of California; teacher in public schools.
(Appointed September, 1919.)

JESSIE RAND TANNER, B.S. ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN

B.S. and Bachelor's Teaching Diploma, Teachers College, Columbia University.

Graduate, Boston Normal School of Gymnastics; Graduate student, University of California and University of Southern California.

Tutor, Brookline, Massachusetts; Supervisor of Physical Education, San Diego County Rural Schools, 1921-1923. (Appointed July, 1919.)

FRANKLIN D. WALKER, B.A. ASSOCIATE PROFESSOR OF ENGINEERING

B.A., (Hons. Oxon), University of Oxford.

Student, University of Arizona; Holder of Arizona Rhodes Scholarship to Oxford; Graduate student, University of California.

Instructor in Dramatics, Francis W. Parker School, San Diego, California.
(Appointed September, 1919.)

CURTIS REYNOLDS WALLING, E.E. INSTRUCTOR IN MATHEMATICS AND INDUSTRIAL ARTS

A.B., E.E., Stanford University.

Student, State Teachers College of Fresno; graduate student, Stanford University. Graduate student training course, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pennsylvania.
(Appointed September, 1919.)

W. H. WRIGHT, M.A. ASSOCIATE PROFESSOR OF COMMERCE

B.S., M.A., University of California.

Head of Department of Commerce, Visalia Union High School, Visalia, California.
(Appointed September, 1919.)

SUPPLEMENT TO FACULTY LIST FOR 1931-1932

- MAINE BAER, M.A.** INSTRUCTOR IN FOREIGN LANGUAGES
 A.B., M.A., University of Michigan.
 Summer study, University of Mexico.
 Teacher of French and English, Allegan High School, Allegan, Michigan. Instructor in French and Spanish, University of Toledo.
 (Appointed September, 1931.)
- UL A. HARVEY, M.S.** INSTRUCTOR IN BIOLOGY
 B.S., Oregon Agricultural College; M.S., University of Minnesota.
 Graduate student, University of Wisconsin, Harvard University, University of California.
 Teaching Fellow at University of Minnesota, University of Wisconsin, Harvard University; Assistant Professor of Botany, Pomona College; Professor of Biology, Whitworth College.
 (Appointed September, 1931)

ASSOCIATE (PART-TIME) MEMBERS OF THE FACULTY

- ZABETH MCPIKE BROWN, PH.D.** ASSISTANT PROFESSOR OF FRENCH
 Ph.B., M.A., Ph.D., University of Chicago.
 Diplôme de Phonétique, École des Hautes Etudes, Paris, France;
 Certificate d' Etudes Françaises, University of Paris.
 Assistant in French, University of Chicago; Head of French Department, Rockford College, Rockford, Illinois; Instructor in University of California, Extension Division, San Diego, California.

- AN BLAKE** INSTRUCTOR IN METEOROLOGY AND CLIMATOLOGY
 Meteorologist, United States Weather Bureau, San Diego.

- RIAN EVANS, B.S.** INSTRUCTOR IN EDUCATION
 B.S., New York University.
 Graduate, State Normal School, Los Angeles; Student, University of California, University of New Mexico, State Teachers College of San Diego.
 Teacher, San Bernardino, Sierra Madre, San Marino; Director of Visual Education Activities, San Diego City Schools.

- INALD POLAND, A.M.** PROFESSOR OF ART
 A.B., Brown University; A.M., Princeton University; A.M., Harvard University.
 Fellowship from Princeton University to American Academy at Rome.
 Director of Denver Art Association; Educational Secretary, Detroit Institute of Art; Director of San Diego Fine Arts Gallery.

- L J. STANTON, LL.B.** ASSISTANT PROFESSOR OF LAW
 LL.B., University of Michigan.
 Graduate student, University of Michigan.
 Editor legal journal; practicing attorney, Michigan and California.
 Instructor, San Diego High School and Junior College.

ASSISTANTS

- D B. MITCHELL** ECONOMICS
- TON A. NICOL, B.S.** SURVEYING AND INDUSTRIAL ARTS
- REY BOWEN PETERSON, A.B.** TRAINING SCHOOL
- H. SHORE** ECONOMICS
- DE MARIE KRAMER WALKER** GERMAN

MEDICAL EXAMINERS

FRANCES ALLEN, M.D.	MEDICAL EXAMINER AND ADVISOR FOR WOMEN
O. S. HARBAUGH, M.D.	MEDICAL EXAMINER AND ADVISOR FOR MEN

LIBRARY STAFF

JOHN PAUL STONE, M.S. IN LIBRARY SCIENCE	LIBRARIAN
GENEVIEVE KELLY, A.M.	ASSISTANT LIBRARIAN IN CHARGE CATALOGING
LULU GERMANN, B.S.	ASSISTANT LIBRARIAN IN CHARGE CIRCULATION
HARRIET B. STOVALL	ASSISTANT LIBRARIAN IN CHARGE MENDING AND LETTERING
ALICE E. PRATT, Ph.D.	ASSISTANT LIBRARIAN IN CHARGE REFERENCE WORK
CHARLOTTE G. ROBINSON	LIBRARIAN OF TRAINING SCHOOL

STAFF OF REGISTRAR'S OFFICE

MARGUERITE V. JOHNSON, A.M.	REGISTRAR
DOROTHY MAY HARRISON	ASSISTANT TO THE REGISTRAR
MADOLYN J. MILLER, B.A.	SECRETARY TO THE REGISTRAR

STAFF OF BUSINESS OFFICE

F. W. VAN HORNE	BUSINESS SECRETARY
L. J. CROUCH	ASSISTANT BUSINESS SECRETARY
MAYME J. SULLIVAN	TELEPHONE OPERATOR

STAFF OF PLACEMENT SECRETARY'S OFFICE

MRS. MARY IRWIN McMULLEN	PLACEMENT SECRETARY
ANNE T. SULLIVAN	CLERK

TRAINING SCHOOL STAFF

ERBY CHESTER DEPUTY, Ph.D.	PRINCIPAL
FLORENCE WIGGINS	SECRETARY

MAINTENANCE STAFF

C. L. FISKE	SUPERINTENDENT OF BUILDINGS
MARTIN ROTH	SUPERINTENDENT OF GROUNDS
A. L. SEELIG	ENGINEER
W. T. BOWEN	CUSTODIAN

THE COLLEGE

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897. It received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the Legislature, later approved by the Governor of the State and becoming effective July 28, 1921, the designation of State Teachers College, full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) were offered, both to students preparing for work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service of the new three and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the A.B. degree (major in Education) were established for this institution June 1, 1923.

Since July 1, 1927, the courses formerly carried as "junior college" courses have been offered as lower division courses of the regular four-year curricula. On July 12, 1928, the college was authorized by the State Board of Education to offer presecondary curricula with majors in Chemistry, History, English and Romanic languages, and special secondary certification curricula with majors in Physical Education, and Art, of them leading to the A.B. degree. On January 6, 1930, the State Board of Education authorized the following additional majors in the secondary curricula: Art, Biological Science (Zoology now offered), Social Sciences (Economics, Geography and History now offered); the special secondary certification curriculum with a major in Music. April 12, 1930, the presecondary major in Commerce was authorized by the State Board of Education, and also the special secondary certification curriculum with a major in Commerce. On June 27, 1931, the secondary major in Music was authorized in the same manner.

For the certification of teachers, the authorized courses (elementary, junior high school and special secondary) are offered and, requiring four years of work, lead to the A.B. degree with any one or a combination of the following credentials: Elementary School, Junior High School, Special Secondary in Art, Special Secondary in Commerce, Special Secondary in Music, Special Secondary in Physical Education.

ENVIRONMENT AND STANDARD

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than physical must be taken into account by the student choosing a college. In cultural standards in music, literature, and science, San Diego is a favorable college because, while it is not large, yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-16, including the buildings themselves, which in their consistent and effective carrying out of motifs the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the departments controlling the collections. The Fine Arts Gallery contains excellent exhibitions of paintings. There are plans for the development of a Public Conservatory of Music for which the great out-of-door orchestra furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings, and pageants.

At La Jolla, within the city limits, the Scripps Institution of Oceanography, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point particularly as the college will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The teacher-training program profits because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary school, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the special schools of the city school system and the college.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, so that sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 40 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

Recreational opportunities of an unusual number and variety are offered to students, because of the combination of bay, sea beach, mesas, foothills, and mountains, all within compass of two hours travel by automobile.

loor sports of all kinds, including swimming and rowing, are possible year round.

BUILDINGS AND EQUIPMENT

n February 1, 1931, the college was moved to the new buildings and pus, located one mile north of the city's principal east-west boulevard, Majon Avenue. The campus has an area of one hundred twenty-five s. The new buildings are part of a general plan to be completed in the next few years. This plan calls for one style of architecture he entire group of the Spanish-Moorish type, which is well suited to landscape and climate of the region. The buildings now in use de the Academic Building, which houses lecture halls, class rooms, administrative offices; Science Building, Library, Little Theater, ning School, Scripps Cottage (a social clubhouse for women stu- s), and Student Building housing the soda fountain, café, and store. Within the next year, a structure of the duplex gym- im type, with adequate facilities for the physical education and lopment of both men and women will be completed, together with ovement of the campus which will furnish playing fields and courts ollegiate sports and athletics. The training school is supplied with wn, separate play spaces.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

l entering students are required to meet the health standards set ie department of physical education, and all lower division students, s excused for cause, are required to take the courses in physical ition, prescribed for freshmen and sophomores. Furthermore, each nt is expected as a matter of efficient student and community life ep himself in the best possible physical condition.

andards of scholarship are based upon high entrance standards. Fre- ratings of the student are made by his instructors, so that he may l times know how he stands; but the ability of the student to manage wn educational career and to come reasonably near to his best capa- es are factors that will count in his final ratings.

ice standards of character, as developed by and measured by honest nt work, and as revealed by evidences of the possession of thorough- self-respect and community feeling, particularly as to ideals in the ntant matters of citizenship and future parenthood, are more impor- than all else, every student will have full opportunity to show that worthy and that he has the capacity and the will to manifest and pp character.

ROUTINE AND PROCEDURE

tside of the necessary routine and procedure in the conduct of regis- d, class attendance, conduct of examinations, and the like, college s are controlled by standards which are the result of experience or e reflect a very definite public opinion and college morale. There is nor "system," but there is a standard of honor as to honesty in e work. Matters of personal conduct are not the subject of rules egulations, but are affairs of personal and individual responsibility. ems of conduct and control affecting the student body or student s are dealt with as they arise (if they are not already the subject stom, or of student-body by-laws) and usually, are settled by student l.

ORGANIZATION

THE CALENDAR AND REGISTRATION

The college year is divided into the fall and spring semesters of sixteen weeks each, followed by a summer session consisting of terms of ten and four weeks. Students may enter at the beginning of either semester and at the beginning of either the six or four weeks' summer term.

The Summer Session meets the needs of regular students who wish to gain credits toward the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work in the lower division.

Registration of students will be made September 7, 8, and 9 for the fall semester, and February 3 and 6 for the spring semester. Those entering as freshmen must see that the high school principal's recommendation is on file before registration day. This recommendation must be returned on a form furnished by the college. Those entering with advanced standing must submit transcripts of record covering high school and college work by August 20, January 20, and June 10 for admission to the fall and Spring semesters and the Summer Session, respectively. An application for evaluation must also be filed, stating which curriculum is desired. In the case of transcripts arriving after the dates specified, students will run the risk of being obliged to register as special students without adequate advice concerning their programs with reference to requirements.

ADMISSION TO COLLEGE

Freshman Standing.

Every person admitted as a student to this college must be of good moral character, of good health, and of that class of persons, who, of any age, would be admitted to the public schools of the state without restriction. At entrance, every student must take an examination to determine his physical fitness for the teaching profession.

Graduates of accredited public high schools of California, graduates of the schools of California, and graduates of schools of secondary grade in other states recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study and who are recommended by the principal of the school in which such course of study was completed, may be admitted to undergraduate standing.

Candidates may be admitted by either of two methods:

Regular (clear) admission. High school graduates who present the recommended units and principals' certificates of recommendation, may be granted regular admission. Graduates of three-year senior high schools must present nine recommended units earned in grades ten, eleven and twelve.

Provisional admission. High school graduates who present fewer than the prescribed number of recommended units, but who through their principals' estimations and recommendations, present satisfactory evidence of ability to profit by courses in teacher training, who have abilities, interests and talents desirable in teaching, and who pass suitable college entrance tests, may be admitted as provisional students. At the close of the first semester in residence, a complete reevaluation of the credentials and records of all such students will be made. Students will be granted clear admission, dropped from the college, or for sufficient cause continued as provisional students.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can not meet the requirements of either of the above methods. The entrance examinations of the Board are held in June each year (in California, Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon application form to be obtained from the secretary of the Board upon request.

Advanced standing

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every candidate is required to present a duly certified statement of his record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Credit is given only for regular college work in institutions uniformly recognized as standard colleges, or colleges maintained primarily for the training of teachers, or professional schools in those fields in which this college grants a special credential.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

III. Special Standing.

Either of the two following types of candidate may be admitted as a special student, provided he is at least 21 years of age. (Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students.)

1. High school graduates who did not make a sufficient number of recommended grades to obtain a principal's recommendation may be admitted as special students in such courses as they seem qualified to undertake. In such cases candidacy for graduation depends upon meeting the scholarship requirement of a C average.

2. A candidate who has not had the opportunity to complete a satisfactory high school course, but who is considered competent to undertake certain courses, may be admitted to special standing. Entrance examinations in the subjects of fundamental importance for the proposed work will be assigned whenever it seems advisable. Such a student may become a candidate for graduation upon removing the high school deficiency.

MATRICULATION RECOMMENDATIONS FOR CERTAIN CURRICULA

In planning to comply with the foregoing requirements for fresh standing, the prospective student is advised to arrange his high school program so as to enable him to enter without handicaps the work of the curriculum to which he seeks admission. Although deficiencies in certain subjects may be removed after admission to freshman standing, removal will not only reduce the student's opportunity for elective work but may make it necessary for him to extend his college course beyond the normal period of time required for its completion.

In general preparation for a teacher-training curriculum, the prospective student should have attained proficiency in reading, spelling, writing, arithmetic, and the use of English.

In preparation for major work in the biological sciences and in premedical and pre dental curricula, the prospective student is advised to include chemistry or physics and French or German. For a candidate major in mathematics or physics, the student should include French or German, geometry, algebraic theory and trigonometry in his high school program, and for a major in chemistry he should include algebraic theory and physics or chemistry. Algebraic theory and trigonometry are recommended for a major in commerce. In his preparation for engineering curricula, the prospective student is strongly urged to lay a good foundation in the study of elementary algebra, plane geometry, algebraic trigonometry, physics, chemistry, and mechanical drawing. For a candidate in English or a foreign language, the study of Latin is recommended.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements. The standing of all students is conditional during the first semester of residence.

REGISTRATION PROCEDURE

REGISTRATION

Registration takes place on regularly appointed days at the beginning of each semester. Faculty advisers representing every curriculum assist students in the planning of their programs, but students are urged to study requirements of the curriculum they intend to follow and to decide upon their choice of electives before consulting their advisers. New students should not expect assistance with their programs until registration day. After their first registration, however, students are given the privilege of planning their programs during the preregistration period in the last week of each semester, when they may hold more lengthy consultations with their advisers than on registration day. Since registration is not complete until all fees and course charges have been paid, students should be careful to provide themselves with sufficient funds on registration day.

TESTS REQUIRED AT REGISTRATION TIME AND LATER

(See Calendar for dates.)

An examination for the determination of physical fitness is required of all students at entrance. Appointments are made during registration. All students entering the college are required to take the following tests, mainly for purposes of guidance and assistance: (a) College Entrance Test. (b) English Composition Test.* Exceptions may be made for students who register for six units of work or less, for former graduates of this college, and for graduates of approved four-year colleges. The Fundamentals Test in reading, spelling, arithmetic and handwriting is a prerequisite for certain courses in Education (see descriptions of courses in Education). Exceptions may be made for former graduates of this college and for graduates of approved four-year colleges.

LATE REGISTRATION

A new student who registers after the close of the first week of the semester is subject to a limitation of his program. A fee of \$2 must be paid for registration after the regular registration period. After the first week of the semester, the instructor's approval must be secured for each course entered.

CHANGES IN REGISTRATION

Changes in program may be made only with the approval of the student's adviser. The late registration fee of \$2 is required for the addition of one or more courses after the first week of the semester, if the student

is required mainly for classification purposes. The results must be considered by students and advisers in the making of schedules. Students are themselves primarily responsible in the matter of overcoming deficiencies. No student whose use of the English language continues to be notably inaccurate or inadequate should expect to receive a certificate of graduation from the college.

is responsible for the change. In addition, the instructor's approval must be secured for entering a course after the first week.

AUDITORS

Regular auditors must register in the usual way, though this may be done on the first day on which they have classes, without payment of the late fee.

SEMESTER FEES (REVISED)

Registration fee	\$6.50
Late registration fee (penalty)	\$2.00

OTHER FEES AND DEPOSITS

	FEES	DEPOSIT
Contingent fee	\$8.00	\$4.00
Fee for additional transcript	1.00	
Special examination fee	2.00	
Evaluation of record fee	2.00	
College Aptitude Test	3.00	
English: Subject A	.25	
Fundamentals Test	.50	
Biology	1.50	
Botany	1.50	
Chemistry: 1A, 1B, 6A, 6B, 7, 8	6.50	5.00
101, 102	2.50	5.00
106A, 106B, 107, 108	6.50	5.00
123, 124 (per unit)	2.50	5.00
200 (per unit)	1.00	2.50
English	.50	
Fine and Industrial Arts	1.00	
Geography	.50	
History	1.00	
Music: 2A, 2B	.50	
Physics: 1A, 1B, 1C, 1D, 3A, 3B, 107A, 107B	2.50	*2.00
Practice Teaching (Education 116) (per unit)	.75	
Speech Arts: 55A, 55B, 55C, 55D, 155A, 155B	1.00	
Surveying: 1A, 1B		*2.00
Zoology: 1A, 1B	3.50	
100	2.50	
121	1.50	
Towel	1.00	* .50
Locker (combination lock)	.25	* .75
(key)	.25	* .25

*Students having deposits from the first semester do not pay the deposits for second semester.

Note: This list of fees, authorized by the state departments concerned, supersedes the list printed in the bulletin of 1932-33. The registration fee has been increased and other fees and deposits decreased wherever possible. The increase in the registration fee is necessary to maintain, without impairment, the services of the college to the students.

Board and room, two meals per day, may be procured at from \$30 to \$35 per month. Apartments consisting of one room, kitchenette and bath, renting at \$20 to \$35 per month, will accommodate one or two persons. Single rooms with kitchen privileges at from \$10 to \$20 per month are also available. While at present there are very few accommodations in the immediate vicinity of the college, all of those listed are within reasonable distance and easily accessible to the college.

SELF HELP AND LOAN FUND

A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. An employment service for men is conducted by the Dean of Liberal Arts; and a similar service maintained for the women students by the Placement Secretary. The general loan fund is available for short time loans to worthy young men and women who have been in attendance at the college one or more years. Loan funds are also administered by the Associated Women Students, The Kiwanis Club of San Diego, the City Teachers' Association, the Scotti Rite Woman's Club, and the Entre Nous Club.

ADMINISTRATIVE REGULATIONS

OFFICERS FOR CONSULTATION

Concerning the housing and living arrangements of students, rules of conduct, dates and arrangements for all student social affairs, personal advice (women)—The Dean of Women.

Concerning matters of student-body policy, leaves of absence (men), personal advice (men), etc.—The Dean of Men.

Concerning supervision of practice teaching, conference, credential requirements, etc.—The Dean of Education.

Concerning matriculation, program of studies and teaching, credits, etc. The Registrar and the Board of Student Advisers.

Concerning health and physical condition, college athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The Principal of the Training School.

Concerning student-body affairs.—The executive officers of the student-body; the Dean of Liberal Arts; the Dean of Women; Dean of Men.

Concerning appointments to teaching positions—The Placement Secretary.

Concerning use of the buildings—Superintendent of Buildings.

CLASSIFICATION

Regular students are those students who have complied with the requirements of admission and are registered in 12 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 12 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration students who have completed 30 to 59 units of work are classified as sophomores; those who have completed 60 to 89 units, as juniors, and those who have completed 90 or more units as seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

One unit of credit represents approximately, for the average student, 16 hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work.

Twelve units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal semester's program for all students. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical

education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points. A course in which a student received a passing grade may be used in the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student under 21 years of age will be allowed to register for less than 12 units without the permission of the Registrar.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passing; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus one point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D, otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. Ordinarily to change an I to another grade the work must be completed within a year. In case of failure in a course, no credit is given until the course has been repeated.

To qualify for a certificate in any curriculum or for a diploma of graduation or for a transcript of record with recommendation, in transferring to another collegiate institution, a student must have earned as many grade points as the number of units he has attempted; that is, he must have attained an average of at least C. Grade in all work undertaken at the College. On a transcript of record for a student whose scholarship is below a C average, the honorable dismissal shall be qualified by the phrase "except for scholarship."

ELIGIBILITY FOR PRACTICE TEACHING

No student shall be eligible for practice teaching (Education 116) who has not completed 75 units, and whose entire record, and also his record for the preceding semester, does not average C grade.

UPPER DIVISION STATUS

The faculty has under consideration advancing the requirements for admission to Upper Division status. Any new regulations will be duly announced.

PROBATION AND DISQUALIFICATION

A scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the college.

Any student whose scholarship record shows a cumulative deficit of 12 more grade points for all work undertaken in the college to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

Any probational student whose scholarship falls below an average grade C in any single semester is disqualified for further attendance at the college. Probationary status may be continued until the cumulative grade-point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

ELIGIBILITY FOR EXTRA-CURRICULAR ACTIVITIES

A limited student who fails to pass in all subjects for which he is registered and every other student who fails to pass in 12 units of work in any semester is ineligible in the next succeeding semester to represent the college in connection with any athletic, literary, musical, dramatic, social, or other organization.

SPECIAL EXAMINATIONS

Special examinations are classified as (1) matriculation examinations; (2) final examinations taken at other than the regular time; (3) examinations taken for the purpose of removing conditions; (4) examinations advanced standing.

For every special examination given the student shall pay a fee of two dollars at the business office. The instructor shall give such examination only on the presentation by the student of a receipt showing that the fee has been paid.

EXAMINATIONS AT SPECIAL TIMES

Final examinations shall be given to individual students before the regular final. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements with the instructor to have an incomplete grade reported and must take the deferred final examination not later than the end of the second semester following that in which the incomplete was given. No exceptions shall be made to this rule without the approval of the dean of the department and the instructor concerned.

CONDUCT OF EXAMINATIONS

All final examinations shall be written in Blue Books or other forms which shall be furnished by the college and distributed by the instructor at the beginning of the examination period. No books or papers of any kind shall be brought into the examination room, except by special order of the instructor.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer on a "change of registration card," which must be filed in the Registrar's Office. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. Withdrawal after the sixth week of a semester except for reasons beyond the student's control is interpreted as a failure in the course. A student who withdraws completely from college for any reason after a period for withdrawal without penalty has passed must make application to the Dean of Liberal Arts or to the Dean of Education, who will determine under the general faculty rules what the conditions and grade penalties, if any, shall be.

LEAVE OF ABSENCE

A leave of absence from college for a period not to exceed two years may be obtained for satisfactory reasons from the Dean of Women or the Dean of Men. If the student concerned fails to return to college, he should notify the Registrar's Office. A leave of absence does not release the student from making every possible attempt to complete the requirements of each course to the satisfaction of the instructor. Enforcement of absence beyond two weeks necessitates obtaining the permission of each instructor to continue in the course; if the student is refused permission to return to one or more classes, he should arrange at the Registrar's Office for withdrawal from these courses.

PLACEMENT SERVICE

A Placement Office is maintained by the college as a clearing house of employment information for superintendents and employing boards of students of the college. While the purpose of this office is to assist candidates in securing positions, it is the primary aim of the office to bring about a better adjustment of the teacher to the community. A complete record of college attainments is kept in a confidential file in each registrant of the office and this material is made available to employers. Recommendations are based on records which indicate the item in the candidate's equipment, and particular care is taken to select in each case the candidate who can best meet the requirements of the position. A fee of \$2 is payable each year in which active service is desired.

STUDENT LIFE

ORGANIZATIONS

udent affairs, and organizations to foster them, are many and varied, are well coordinated through the central student body organization. Associated Students. The following list indicates the major activities: t Guild, College Orchestra, Delta Kappa (Chemistry), Engineering Gamma Psi (honorary English); International Relations Club, a Delta Pi (National Education Honor), Men's Glee Club, Mu na (honorary Music), Pendragon, Psychology Club, Spanish Club, and Dagger, Treble Clef Club.

n: Associated Men Students, College Band, College "Y" Club, cil of Twelve, Delta Phi Beta, Epsilon Eta, Eta Omega Delta, Kappa Sigma, Omega Xi, Phi Lambda Xi, Sigma Lambda, Tau Delta Chi. omen: Associated Women Students, Cetza, College Y. W. C. A., en's Athletic Association, Alpha Phi Chi, Alpha Sigma Alpha, Delta Phi, Gamma Phi Zeta, Kappa Theta, Phi Kappa Gamma, Phi Sigma Sigma Pi Beta, Tau Zeta Rho, Theta Chi.

n's Athletics: Football, baseball, basket ball, track, swimming, and

men's Athletics: Basket ball, rowing, swimming, and tennis.

lications: The Aztec (weekly), Del Sudoeste (year book), and El que (quarterly).

ALUMNI ASSOCIATION

college has an active alumni association. Since its reorganization rch, 1929, the Association has steadily gained in membership. The l Homecoming is an important event each year; other meetings take on dates of important athletic contests. The Association also rs the organization of Aztec clubs in various communities. Infor- concerning the Association may be obtained by writing the secre- t the college.

DEGREE REQUIREMENTS

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

The electives in all curricula, which are outlined in detail on the following, must be so chosen that, with the required work, the student have a total of 6 units of credit in English, 12 units in * social science and 12 units in § natural science in the lower division. Courses in journalism or in speech arts are not accepted as satisfying the English requirements. The electives in natural science may be reduced to a minimum of 6 units if the student presents acceptable grades from the high school natural science in laboratory courses offered exclusively for the third and fourth year students. In general, each year's work of high school science will thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work; simply an exemption of the requirements will be permitted.

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under heading College of Instruction). Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Political Science 101 (American Institutions), or the substitute course in Political Science 113 or History 171A-171B or History 173A-173B required of all candidates for the A.B. degree.

The minimum requirements in education demanded by the State range from 12 to 24 or more units, and may be ascertained at registration.

A minimum of 124 units of college work is required. Not less than 60 of these units must be earned in the junior and senior years. All candidates for the A.B. degree must complete at least 30 units of work at college. Twenty-four of these residence units must be taken with rank of senior, at least twelve of which are to be taken in the fall and spring semester, except that graduates of this college and teachers in service in California have until the summer of 1935 to complete the requirement without attendance during the academic year. Graduates from the three-year (ninety-six unit) course, which was in force from 1928 to 1930, may earn the requisite number of units to make a total of one hundred twenty-four by summer session and extension work, provided

* All lower division courses in the following departments, with exceptions noted, may be used in fulfillment of this requirement, subject to such limitations as are imposed by specific requirements in the various curricula:

Anthropology, Economics (except 14A-14B), Geography (except 1 or 1A in curricula leading to teaching credentials, and Geography 3), History, Political Science, Social Economics.

§ The following courses are classified as natural sciences in the lower division. See detailed curriculum requirements for required courses.

N.B. Agriculture 20, Astronomy 5, Botany 7, Geography 1 or 1A, 3, 4, 5, 7; may not be used toward satisfying the natural science requirements in the presecondary curricula.

Agriculture 20, Astronomy 1, 5, 11; Biology 10A-10B, Botany 2, 4, 5, 7; Chemistry 1A-1B, 6A-6B, 7-8; Geography 1 or 1A, 3; Geology 1B, Physics 1A-1B, 1C-1D, 2A-2B, 3A-3B; Zoology 1A-1B.

attend for two consecutive summers of nine weeks each immediately after graduation, or one summer session of nine weeks with six units of session work during the same year, taken at this college or in courses given by the University of California by members of the San Diego State Teachers College faculty. From eight to ten units must be taken during these summers in special "residential degree" courses. Graduates of less than the three-year curriculum and other teachers in service in California will be granted the privilege of the arrangement of two summer sessions with the additional qualifications that all lower division requirements must be satisfied before they are accepted as candidates and that their subject matter offering must be made to conform to present standards. Complete information concerning details may be obtained by writing to the Registrar.

The number of grade points acquired in this college by the candidate for a degree must be equal to the number of units attempted. (See page 10 for an explanation of scholarship grades and grade points.)

Students who are planning to secure California teaching credentials after graduation from this college are urged to follow the curriculum prescribed for the credential or credentials which they wish to earn, throughout the entire four years.

Candidates are urged to fulfill the requirements for at least two credentials, as for example, the junior high and elementary school credentials, the special credentials in art, music, or physical education and the senior high school credential (elementary school credential is also desirable with one of these combinations). *In such cases, the curriculum for the credential sought must be completed in full.* This will facilitate advancement upon graduation, especially for inexperienced teachers.

For the elementary school credential, two academic teaching minors are required; for the junior high school credential, or for both the elementary and junior high school credentials together, an academic teaching major and an academic teaching minor are required. An academic teaching major consists of 24 units in a field other than education, one of which must be in the upper division. An academic teaching minor consists of 12 units in a field other than education, six of which must be in the upper division. Academic teaching majors and minors have been established in the following fields: English, foreign languages, mathematics, natural sciences,¹ and social sciences² (economics, geography, history, political science, sociology). Academic teaching minors have also been established in art and music. A student who plans to do advanced work in the field of his academic teaching major is advised so to arrange his electives as to complete the presecondary major to avoid the necessity of making up an undergraduate deficiency.

Candidates for the academic teaching major in the field of the natural sciences must meet the general requirement of twelve units of natural science in the lower division including Biology 10A-10B, unless taken in high school. The remaining eighteen units must be chosen so as to include a year course in physics and a concentration of twelve units, at least six of which are upper division, in one major subject (botany, chemistry, physics, zoology).

Candidates for an academic teaching major in the field of the social sciences must meet the general requirements of twelve units of social science in the lower division including Geography 2 and Social Economics. The remaining eighteen units must be chosen so as to include a year course of six units in history in either the lower or upper division and a concentration of twelve units, at least six of which are upper division, in one major subject (economics, geography, history, political science).

Specific requirements for presecondary majors in art, chemistry, commerce, economics, English, foreign language, geography, history, mathematics, and zoology may be found in the section giving the presecondary degree curricula and also immediately preceding the course descriptions in those subjects.

Students who take the A.B. degree with only a special credential who contemplate doing graduate work for a master's degree at another institution of higher learning in an academic field, are advised to use their electives to lay a foundation for that work.

CURRICULA LEADING TO TEACHING CREDENTIALS

A.B. Degree With Elementary School Credential

FRESHMAN YEAR

First Semester—	Units
Biology 10A, ¹ General (unless taken in high school)-----	3
Social Ethics-----	0
Geography 1 or 1A, Elements (Natural Science)-----	3 or 2
Physical Education 1A or 52A-----	$\frac{1}{2}$
Art 6A, Structure-----	2

Second Semester—	Units
Biology 10B, ¹ General (unless taken in high school)-----	3
Geography 2 or 2A, Regions (Social Science)-----	3 or 2
Physical Education 1B or 52B-----	$\frac{1}{2}$
Education 19, Art in the Elementary School-----	2

Third Semester—	Units
Social Economics 10, Introduction to Social Science-----	3
Electives, ² including two minors ³ (for the year)-----	12 or 14
	32

SOPHOMORE YEAR

First Semester—	Units
Psychology 1A, General-----	3
Music 1A, Sight-singing and Ear-training-----	2
Physical Education 1C or 52, Play Activities (women)-----	$\frac{1}{2}$

Second Semester—	Units
Education 17, Music in the Elementary School-----	2
Physical Education 53 or 54, Administration of Phys. Edu.-----	2
Physical Education 1D or 52D-----	$\frac{1}{2}$

Third Semester—	Units
Education 1, Introductory Principles-----	3
Art 61A, Elementary Crafts-----	2
Art 61B, Elementary Crafts-----	2
Electives, including two minors ⁴ (for the year)-----	15
	32

Possible substitutions for the requirement in Biology 10A-10B.

1. Botany 2A-2B and Zoology 1A-1B—16 units.
2. High school Botany plus Zoology 1A-1B.
3. High school Zoology plus Botany 2A-2B.
4. High school Botany plus high school Zoology.

See first paragraph of Degree Requirements.

Unless minor is English, Natural Science or Social Science.

6 units in minor taken in Freshman year, none needed in Sophomore

JUNIOR YEAR		Units
First Semester—		
Education 125A, Curricular Activities—Lower Levels	-----	3
Education 126, Children's Literature	-----	2
Education 129, Mathematics in the Elementary School	-----	2
Psychology 102, Genetic	-----	3
Second Semester—		
Education 116, Practice Teaching	-----	3
Education 125B, Curricular Activities—Upper Levels	-----	3
Either Semester—		
Education 108, Educational Measurements	-----	3
Physical Education 151, Health Education	-----	2
Political Science 101 (or substitute)	-----	2
Electives, including two minors (for the year)	-----	7
		30

SENIOR YEAR		
First Semester—		
Education 116, Practice Teaching	-----	6
Second Semester—		
Education 106, ⁶ philosophy	-----	3
Electives, including two minors ⁵ (for the year)	-----	21
		30

SUMMARY		
Art 6A, 61A, 61B	-----	6
Education 1, 17, 19, 106, 108, 116, 125A, 125B, 126, 129	-----	32
English	-----	6
Music 1A	-----	2
Natural Science (incl. Biology 10A-10B and Geography 1 or 1A)	-----	12
Physical Education 1A-B-C-D or 52, 52A-B-D; 53, 151	-----	6
Political Science 101	-----	2
Psychology 1A, 102	-----	6
Social Science (incl. Social Economics 10 and Geography 2 or 2A)	-----	12
Electives, including two academic teaching minors	-----	40
		124

⁵ If 6 units in minor taken in Junior year, none needed in Senior year.
⁶ Not required if junior high school or special credential is earned the same time.

A.B. Degree With Junior High School Credential

FRESHMAN YEAR

First Semester—		Units
Social Ethics		0
Biology 10A, ¹ General (unless taken in high school)		3
Geography 1 or 1A, Elements (Natural Science)		3 or 2
Physical Education 1A or 52A		$\frac{1}{2}$
Second Semester—		
Biology 10B, ¹ General (unless taken in high school)		3
Geography 2 or 2A, Regions (Social Science)		3 or 2
Physical Education 1B or 52B		$\frac{1}{2}$
Third Semester—		
Social Economics 10, Introduction to Social Science		3
Electives, ² including major and minor ³ (for the year)		16 or 18
		32

SOPHOMORE YEAR

First Semester—		Units
Psychology 1A, General		3
Physical Education 1C (men) or 52C		$\frac{1}{2}$
Second Semester—		
Physical Education 1D or 52D		$\frac{1}{2}$
Third Semester—		
Education 1, Introductory Principles		3
Electives, ² including major and minor ⁴ (for the year)		25
		32

JUNIOR YEAR

First Semester—		Units
Education 125B, Curricular Activities—Upper Levels		3
Political Science, 101, American Institutions (or substitute)		2
Psychology 102, Genetic		3
Education 108, Educational Measurements		3
Second Semester—		
Education 116, Practice Teaching		3

possible substitutions for the requirements in Biology 10A-10B:

1. Botany 2A-2B and Zoology 1A-1B—16 units.

2. High school Botany plus Zoology 1A-1B.

3. High school Zoology plus Botany 2A-2B.

4. High school Botany plus high school Zoology.

See first paragraph of Degree Requirements.

Unless major or minor is English, Natural Science or Social Science.
6 units in minor taken in Freshman year, none needed in Sophomore

Either Semester—	Units
Curriculum in Field of Academic Major-----	2
Physical Education 151, Health Education-----	2
Electives, including major and minor (for the year)-----	12
	30

SENIOR YEAR

First Semester—	
Education 116, Practice teaching-----	6
Second Semester—	
Education 121, Principles of Secondary Education-----	2
Either Semester—	
Education, elective-----	2
Electives, including major and minor ⁵ (for the year)-----	20
	30

SUMMARY

Education 1, 108, 116, 121, 125B, Curriculum in Field of Academic Major, and elective in Education-----	24
English-----	6
Natural Science (incl. Biology 10A-10B and Geography 1 or 1A)	12
Physical Education 1A-B-C-D or 52, 52A-B-D; 151-----	4
Political Science 101-----	2
Psychology 1A, 102-----	6
Social Science (incl. Social Economics 10 and Geography 2 or 2A)	12
Electives, including academic teaching major and minor-----	58
	124

⁵ If 6 units in minor taken in Junior year, none needed in Senior year

A.B. Degree With Special Credential in Art

This course leads to the A.B. degree and to the Special Credential in Art which entitles the holder to teach art in senior high, junior high, and elementary schools.

LOWER DIVISION

	Units
6A-6B, Structure	4
61A-61B, Elementary Crafts	4
Education 1, Introductory Principles	3
Education 19, Art in the Elementary School	2
English	6
Natural Science	12
Physical Education 1A-1B, 1C-1D (men) ; 52A-52B, 52C-52D (women)	2
Sociology 1A, General	3
Social Science, incl. Social Econ. 10, Intro. to Social Science	12
Social Ethics (First semester, freshman year)	0
Electives, including additional Art for major	16
	64

UPPER DIVISION

Education 116, Practice Teaching (4 units in special field)	9
Education 119, Art in the Junior High School	2
Education 121, Principles of Secondary Education	2
Education 125B, Curricular Activities—Upper Levels	3
Education, elective (suggested: Education 106 or 108 or 130)	3
Physical Science 101, American Institutions (or substitute)	2
Electives, including additional courses in Art	39
	60

SUMMARY

Art major	50
Education	24
English	6
Natural Science	12
Physical Education	2
Physical Science 101, American Institutions	2
Sociology	3
Social Science (including Soc. Econ. 10)	12
Electives	13
	124

Students who wish to secure the Junior High School Credential may use their electives to satisfy the requirements of that pattern if they choose Social Science or Natural Science as an academic teaching field. Complete requirements may be found on page 33.

See first paragraph of Degree Requirements.

A.B. Degree With Special Credential in Commerce

This course leads to the A.B. degree and to the Special Credential in Commerce, which entitles the holder to teach commercial subjects in senior high, junior high, and elementary schools.

In addition to the following academic requirements, satisfactory evidence of one-half year, or 1000 hours of approved experience in the must be submitted.

LOWER DIVISION

	Units
Economics 1A-1B, Principles of-----	6
Economics 11, Economic History of the United States-----	3
Economics 14A-14B, Accounting-----	8
Economics 18A-18B, Commercial Law-----	6
Education 1, Introductory Principles-----	3
English 1A-1B, Composition-----	6
Geography 1, Elements (Natural Science)-----	3
Geography 2, Regions (Social Science)-----	3
Mathematics 2, Mathematics of Investment-----	3
*Natural Science -----	9
Physical Education 1A-B-C-D, or 52A-B-C-D-----	2
Psychology 1A, General-----	3
Secretarial Training A, Business Mathematics-----	1
Secretarial Training 3A, Office Methods and Appliances-----	3
Social Economics 10, Introduction to Social Science-----	3
Elective -----	3
	65

UPPER DIVISION

Economics 121, Business Administration -----	3
Economics 140, Statistical Methods -----	3
Economics 160, Advanced Accounting -----	3
Economics 161, Cost Accounting -----	3
Economics 163, Machine Accounting -----	3
Education S21, Penmanship Methods (to be taken in Summer Session) -----	2
Education 116, Practice Teaching -----	9
Education 121, Principles of Secondary Education-----	2
Education 163, Stenography-----	2
Education 164, Bookkeeping -----	2
Education 165, Typewriting -----	2
Education, Elective (Educational Psychology recommended) --	3
Geography 141, Economic Geography-----	3
Geography elective, upper division-----	3
Political Science 101, American Institutions-----	2
Secretarial Training 1A-1B, Typewriting-----	6
Secretarial Training 5A-5B, Stenography-----	10
	61

* See first paragraph of Degree Requirements.

SUMMARY

	Units
conomics -----	38
cation -----	25
lish -----	6
graphy -----	12
hematics -----	3
aral Science (in addition to Geography 1) -----	9
sical Education -----	2
tical Science 101, American Institutions -----	2
hology -----	3
etarial Training -----	20
al Economics 10, Introduction to Social Science -----	3
tive -----	3
	—
	126

A.B. Degree With Special Credential in Music**

This course leads to the A.B. degree with a Special Credential in Music entitling the holder to teach music in senior high, junior high and elementary schools.

	Units
Education 1, Introductory Principles (sophomore year)-----	3
Education 17, Music in the Elementary School-----	2
‡English -----	6
*Music, Applied -----	18
Music 1A-1B, 1C-1D, or 1B, 1C, 1D, 1E, Music Reading and Ear Training -----	8
Music 2A-2B, Appreciation and History-----	4
Music 4A-4B, Elementary Harmony-----	6
Music 11A-B-C-D, or 12A-B-C-D or 20A-B-C-D-----	2
‡Natural Science -----	12
Physical Education 1A-1B, 1C-1D (Men) ; 52A-52B, 52-52D (Women) -----	2
Psychology 1A, General (sophomore year)-----	3
‡Social Science, incl. Soc. Econ. 10, Intro. to Social Science--	12
Social Ethics (First semester, freshman year)-----	0

UPPER DIVISION COURSES

Education 116, Practice Teaching (at least 4 units in Music)	9
Education 121, Principles of Secondary Education-----	2
Education 127, Music in the Secondary School-----	2
Education 145, Org. and Adm. of Music Education-----	2
Education, elective -----	4
Music 103A-103B, Appreciation and History-----	2
Music 105A-105B, Advanced Harmony -----	4
Music 107A-107B, Conducting -----	2
Music 108, Instrumentation -----	2

* Applied Music to be distributed as follows:

Orchestral instrument(s) (Including at least one year of Orchestra (if qualified) and/or Instrumental Ensemble)-----	
**‡‡ Piano -----	
Voice -----	

(Applied Music credits, $1\frac{1}{2}$ units per semester, for not less than one lesson per week, with six hours practice per week, totaling at least six hours instruction and one hundred hours practice per semester. Applied Music is taken under outside private teachers, subject to the approval and supervision of the music department of the college, which determines credits and grades by examination. Upper division credit not allowed for beginning work in applied music.)

‡ See first paragraph of Degree Requirements.

‡‡ Minimum attainment for completion of Piano Requirement in Music curriculum is the ability to play accompaniments such as are found in the Teachers Manuals of the Progressive Music Series, Books Three and Four.

** Applicants for admission to the Music curriculum will be required to take an entrance examination in Piano, to determine their ability to play satisfactorily hymns and folk songs of the type found in the Good Book of Favorite Songs. Those not able to meet this requirement may study piano without credit until able to pass such an examination. They may also take examinations in Fundamentals of Music, and Harmony, and advanced standing in these subjects.

UPPER DIVISION COURSES—Continued

	Units
Science 111A-B-C-D, or 112A-B-C-D, or 120A-B-C-D-----	2
Physical Science 101, American Institutions (or substitute)-----	2
Electives -----	13
	124

SUMMARY

Education -----	24
English -----	6
Science major -----	50
Natural Science -----	12
Physical Education -----	2
Physical Science 101, American Institutions-----	2
Psychology -----	3
Natural Science (including Soc. Econ. 10)-----	12
Electives -----	13
	124

A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high, and elementary schools.

MEN

LOWER DIVISION

	Units
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A, General-----	4
Education 1, Introductory Principles (sophomore year)-----	3
†English-----	6
Hygiene 1-----	1
†Natural Science-----	2 0
Physical Education:	
1A-1B, 1C-1D-----	2
6A, Tennis-----	1 1/2
54, Administration-----	2
Psychology 1A, General (sophomore year)-----	3
Red Cross Swimming Test-----	1 1/2
†Social Science, incl. Soc. Econ. 10 and 50-----	12
Social Ethics (first semester, freshman year)-----	0
Speech Arts 1A, Elements of Public Speaking-----	3
Zoology 1B, General-----	4
Electives-----	15
	64

UPPER DIVISION

Education 116, Practice Teaching-----	9
Education 121, Principles of Secondary Education-----	2
Education 125B, Curricular Activities—Upper Levels-----	3
Education, elective-----	7
Physical Education:	
101, Emergencies-----	1
151, Health Education-----	2
155, Applied Anatomy-----	2
156A-156B, Sports Methods-----	4
162A-162B, Gymnastic Activities-----	4
163, Aquatics-----	1 1/2
165, Self Defense-----	1 1/2
166A-166B, Technique of Officiating-----	2
171, Community Recreation-----	2
172, Principles-----	2
180, Tests and Measurements-----	2
Sports and Athletics-----	1

† See first paragraph of Degree Requirements.

MEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions (or substitute)---	2
Zoology 102, Genetic (first semester, junior year)-----	3
Zoology 100, Embryology-----	3
or	
Zoology 114A, Genetics-----	2
or	
Zoology 121, Entomology-----	3
Electives -----	10-11
	64

SUMMARY

Education -----	24
English -----	6
Technical Arts 1A-----	3
Natural Science (including Biol. 10A-10B or substitute and Zoology 1B)-----	12
Physical Education major-----	30
Political Science 101, American Institutions-----	2
Zoology -----	6
Natural Science (including Soc. Econ. 10 and 50)-----	12
Zoology (upper division)-----	2 or 3
Electives -----	26-27
	124

Students are advised to secure the Junior High School Credential in
tion. The requirements may be met at the same time if a suitable
lemic teaching major is chosen; the minor subject may be omitted.
complete requirements, see page 33.

WOMEN
LOWER DIVISION

	Units
Anthropology 50A, General-----	3
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A, General-----	4
Education 1, Introductory Principles (sophomore year)-----	3
†English -----	6
Hygiene 2, Personal and Civic-----	2
†Natural Science -----	2-4
Physical Education:	
52, Play Activities-----	1½
52A-52B, 52D-----	1½
53, Administration-----	2
55, Swimming-----	1½
56, Tennis-----	1½
Psychology 1A, General-----	3
†Social Science, incl. Soc. Econ. 10, Intro. to Social Science--	9
Social Ethics (first semester, freshman year)-----	0
Speech Arts 1A, Elements of Public Speaking-----	3
Zoology 1B-----	4
Electives -----	18
	64

UPPER DIVISION

Education 108, Educational Measurements-----	3
Education 116, Practice Teaching-----	12
Education 121, Principles of Secondary Education-----	2
Education 125A, Curricular Activities—Lower Levels-----	3
Education 140, Educational Statistics-----	3
or	
Education 106, Philosophy-----	3
Education, elective-----	2
Physical Education:	
57, Golf -----	1½
102, Emergency and Safety Programs-----	1
151, Health Education-----	2
154, Applied Anatomy-----	2
157A-157B, Sports Methods-----	4
158, Stunts and Tumbling-----	1
160, Formalized Activities-----	2
161, Folk Dancing-----	2
164, Dancing -----	2
170, Recreational Leadership-----	2
173, Principles -----	2
or	
180, Tests and Measurements-----	2

† See first paragraph of Degree Requirements.

WOMEN—Continued

UPPER DIVISION—Continued		Units
68, Physiology of Exercise-----		2
75, Current Problems-----		2
77, Individual Program Adaptations-----		2
Political Science 101, American Institutions (or substitute)---		2
Psychology 102, Genetic (first semester, junior year)-----		3
Psychology 100, Embryology-----		3
Psychology 114A, Genetics-----		2
Psychology 121, Entomology-----		3
Electives-----		1½-2
		60

SUMMARY

Education-----	28
English-----	6
Science-----	2
Technical Arts 1A-----	3
Natural Science (including Biol. 10A-10B or substitute, and Psychology 1B)-----	12
Physical Education major-----	31½
Political Science 101, American Institutions-----	2
Psychology-----	6
Natural Science (including Soc. Econ. 10, Anthro. 50A)-----	12
Psychology (upper division)-----	2-3
Electives-----	21½-22½
	127

Students are advised to secure the Junior High School Credential in addition. The requirements may be met at the same time if a suitable academic teaching major is chosen; the minor subject may be omitted. For complete requirements, see page 33.

Administration and Supervision Credentials

The State Board of Education has authorized this college to make recommendations for the issuance of Administration and Supervision credentials for holders of Elementary and Junior High School credentials who have completed the required 15 units beyond the requirements for teaching credential and who have completed two years of successful teaching experience. *But holders of general secondary credentials must complete the required courses in and receive recommendation from an accredited graduate school, even though they may wish to qualify for administrative or supervisory work only on the elementary or junior high school*

In order to secure the recommendation of this college for either one of the credentials, the following number of the 15 required units must be completed at this institution:

- Graduates of this college—6.
- Graduates of other institutions—9.
- County certified teachers—12.

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND T A.B. DEGREE IN THE PRE-SECONDARY CURRICULA

This course leads to the A.B. degree. Completion of the requirements of this curriculum also enables the graduate to satisfy the undergraduate requirements for the General Secondary credential which, with postgraduate work, will enable the holder to teach in a senior high school or junior college. The degree courses are limited to majors in art, chemistry, commerce, economics, English, geography, history, mathematics, modern languages, and zoology.

The junior certificate will be granted on the completion of 64 units of college work and the degree on the completion of 124 units. Certain requirements of the junior certificate may be met by courses taken in high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree.

LOWER DIVISION

FRESHMAN YEAR	Units	Units
	Sem. I	Sem. II
Social Ethics -----	---	---
Orientation -----	1	---
Physical Education -----	$\frac{1}{2}$	---
Hygiene 1 or 2 -----	1 or 2	---
English ¹ -----	3	3
Foreign Language ² or electives -----	3-5	3
Social Science ³ -----	3	3
Natural Science ⁴ and/or electives, ⁵ including preparation for the major -----	$1\frac{1}{2}$ - $4\frac{1}{2}$	4
	16	16
SOPHOMORE YEAR		
Physical Education -----	$\frac{1}{2}$	---
Foreign Language ² -----	3	3
Additional year course ⁶ -----	3	3
Social Science ³ -----	3	3
Natural Science ⁴ or electives -----	3	3
Electives, ⁵ including preparation for the major -----	$3\frac{1}{2}$	3
	16	16

¹ The English requirement may be satisfied either in the Freshman or in the Sophomore year. To be chosen from the following year-courses: English 1A-1B, 4A-4B, 12A-12B, 52A-52B, 56A-56B.

² At least 15 units in not more than two languages required in the Lower Division, except that only 10 units in a modern language are required in the commerce major. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement.

³ To be chosen from the following: Anthropology 50A-50B, Economics 1A-1B,* 11, 18A-18B, Geography 1-2,* History 4A-4B,* 5A-5B,* 8A-8B, Political Science 1A-1B,* Social Economics 50.

⁴ Twelve units are required.

A maximum of 6 units of the following high school laboratory courses may be used to meet the natural science requirement when these courses are offered exclusively for students in the third or fourth year of the school. Each year of the high school course will be counted in satisfaction of 3 units of the requirement: Physics,* Chemistry,* Botany, Biology,* Physiology, Zoology.

A minimum of 6 units must be chosen from the following: Astronomy 11, Biology 10A-10B,* Botany 2A*-2B,* 4, 5, Chemistry 1A*-1B,* 6A-* 7-8,* Geology 1A, 1B, Physics 2A-2B, 3A-3B,* 1A-1B,* 1C-1D,* Biology 1A*-1B,* 100.*

A total of not more than 12 units of the applied and vocational courses listed below will be counted toward the degree or the junior certificate: Agriculture 20, 26; Art 61A, 61B; Journalism 53A-53B, 153A-153B; Music 1A, 1B, 1C-1D, 19A-19B, 19C-19D, 20A-20B, 20C-20D, 109A-109B, 110A-110B, 119A-119B, 119C-119D, 120A-120B, 120C-120D, 121A-121B, courses in Applied Music, and all musical organizations; Physical Education 3A-B to 14A-B, 52, 53, 54, 55, 56, 151, 155, 156A, 156B, 157A, 157B, 162A, 162B, 163, 165, 166A, 166B, 168, 170, 171, 172, 173, 174, 175, 178A, 178B, 179, 180; Secretarial Training all courses.

In addition to the minimum requirement of 15 units in not more than four languages, of 6 units in English, and of year courses in high school elementary algebra and plane geometry, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses.

Latin: Two years of high school courses in Latin.

Mathematics: 1A-1B, 3A-3B, 7A-7B, or any combination of 3A, 8, C, or 8, C. Mathematics 1A and 2 are required of all students with the commerce major.

Philosophy: 5A-5B.

At least one of the courses marked with an asterisk must be chosen to meet the social science requirement and the natural science requirement, respectively.

LOWER DIVISION REQUIREMENTS FOR PRE-SECONDARY MAJORS

The student is advised to choose his major as early in his course as practicable so that he may be able to plan his work according to the major requirements. Failure to meet the lower division requirements of the major department before the junior year may make impossible to satisfy the upper division requirements within the normal period of two years.

Art

Eighteen units carefully chosen from lower division art courses to the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective in art.

Chemistry

Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-8, Physics 2A-2B and 3A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in Chemistry or to transfer to another college, and there work for a degree with a major in Chemistry are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Commerce

Economics 1A-1B, 11, 14A-14B (6 units); English 1A-1B; Geography 1-2; Mathematics 1A and 2; History 4A-4B or 8A-8B or Political Science 1A-1B.*

Economics

Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 1A, 2B; Geography 1A-1B. Recommended: Social Economics 50; Economics 14A-14B, 18A-18B.

English

English 1A-1B and nine units from 12A-12B, 56A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

Foreign Languages

Group major: French A-B, C-D and Spanish A-B, C-D.

The group major requirements are based on the assumption that the student will have taken courses in the high school, equivalent to a college course in elementary French or Spanish.

Economics 1A-1B-----	6 un.	Hygiene -----	1 or 2
Economics 11-----	3	Mathematics 1A, 2-----	7
Economics 14A-14B-----	6	Natural Science-----	12
Economics 18A-18B-----	6	Physical Education-----	2
English 1A-1B-----	6	Social Economics A-----	0
Foreign Language-----	10	Social Economics 1-----	1
Geography 1-2-----	6		
History 4A-4B, 8A-8B or			
Political Science 1A-1B--	6		

* Summary of all lower division requirements for the commerce major.

Geography

Geography 1, 2, 3 and Geology 1A-1B. Recommended: A reading knowledge of French or German.

History

History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-5B.

Mathematics

Mathematics 3A-3B, 4A-4B. With permission of the department, 7A may replace 3A-3B, and 14A may replace 4A-4B. Recommended: Physics, Surveying, Descriptive Geometry, Astronomy and a reading knowledge of French and German.

Music

Music 1A-1B, 2A-2B, 4A-4B, and 2 units of electives in music. The electives in music in both lower and upper division must include at least 2 units in Applied Music (study of voice, or an instrument), of which at least 3 units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 45.)

Zoology

Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and 5.

* * * * *
Additional lower division majors available for the Junior certificate may be found immediately preceding the course descriptions in the fields of astronomy, journalism, physics, political science, psychology and speech.

UPPER DIVISION

For requirements in upper division courses, residence requirements, and scholarship requirements for graduation, see regulations under the heading General Requirements for the Degree of Bachelor of Arts.

For restrictions on applied and vocational courses see footnote 5 under upper division requirements.

Political Science 101, American Institutions, or the substitute course Political Science 113 or History 171A-171B or History 173A-173B is required of all candidates for the A.B. degree.

Three units in general psychology must be included in the upper division program if not taken in the lower division.

A minimum of 12 units in education is required and a maximum of 18 will be counted toward the degree. The courses in education must be chosen from the following list:

1. I, Introductory Principles (lower division elective); Ed. 121, Principles of Secondary Education; Ed. 106, Philosophy of Education; Ed. 107, History of Education; Ed. 108, Educational Measurements; Ed. 109, Educational Administration and Supervision; Ed. 137, Comparative

Education; Ed. 130, Educational Psychology; Ed. 140, Elementary Statistics; Psychology 102, Genetic Psychology.

A minimum of 12 units in a minor subject is required, at least 6 of which shall be in upper division courses completed in the junior and senior years. Minors are available in the following subjects: art, chemistry, economics, English, foreign language, geography, history, mathematics, music, physics, political science, psychology, zoology.

The major requirements of one of the following fields must be completed:

Art

Not less than twenty-four units of upper division art. These include Art 112A, 115A-115B, 150, 152A, 195, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements in choosing free electives, select from the following courses: English 4A-4B, 106A-106B, 117; French A-B, History 4A-4B, 111A-111B, Speech Arts 55A-55B, 155A-155B.

Chemistry

A minimum of twenty upper division units in Chemistry including Chemistry 101-102 and 123-124. The choice of a related minor and organization of the course of the major student must follow a department plan approved by the department.

Commerce

Econ. 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, and 18 units additional chosen in one of the following groups:

A. Accounting: Econ. 160A-160B, 161, 163, and 6 units in electives.

B. Banking and Finance: Econ. 131, 133, 134, 135, and 6 units in electives.

C. Marketing and Merchandising: Econ. 123, 125, 171, and 9 units in electives.

Geog. 141 may be used in the electives under A, B, C.

Economics

Required: Economics 100 and 140, with 9 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171, 194, 199. Elective: 3 upper division units in general and applied economics, 6 additional upper division units in any combination of general and applied economics, and economic geography.

English

Forty-two units in English, of which six lower division units may be in journalism and speech arts and three upper division units may be in composition. At least eighteen units in upper division courses must be completed in the junior and senior years.

Foreign Languages

Group major: Eighteen upper division units in one language or twenty units in one language and six units in the other.

Geography

Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

History

Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199, in connection with which he must write a paper, the subject matter to be arranged in consultation with the instructor.

Mathematics

Twenty-four units of upper division work in mathematics, or eighteen units in mathematics and six units in closely related subjects, arranged in consultation with the chairman of the department. Mathematics 111, 118, and 119 should be included in every major, except that students who have taken 14B need not take 119. Related courses offered by other departments include Statistical Methods (Economics 140), Mathematics in the Elementary School and in the Junior High School (Education 129 and 112) and certain upper division courses in chemistry and physics.

Music

Music 103A-103B, 105A-105B, 106A-106B, 107A-107B, 108, and 109 are units of upper division elective courses in music. (See statement concerning Applied Music under lower division requirements.)

Zoology

(1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, and physiology.

Lower Division Arrangements and the Junior Certificate

The State Board of Education has authorized fields in which majors and minors may be given in the California Teachers Colleges as follows: Agriculture, Art, Biological Science, Education, Commercial Education, English, Foreign Languages, Home Economics, Industrial Arts Education, Mathematics, Music, Physical Education, Physical Science, Philosophy, Psychology, Social Science.

Since the professional training of teachers requires the maintenance of a standard lower division courses in the field of letters and science, and since courses are available for students of this college who wish to make adaptations of their lower division curricula to correspond to the typical lower division preprofessional curricula. The completion of a curriculum will give junior standing upon transfer to a college offering upper division work in the appropriate field. Such available adaptations of freshman and sophomore courses offered by this college are: Prelegal, premedical, prepedagogical, social service, engineering, preagricultural, accounting-secretarial training. Special advisers have been appointed for each of the above curricula, who will assist students at registration time in planning out programs so that they may qualify for the Junior Certificate. A list of these advisers is published in the Time Schedule each semester.

COURSES OF INSTRUCTION

One "unit" represents an hour recitation or lecture, together with required preparation, or three hours laboratory work each week, semester of 18 weeks.

Courses numbered from 1 to 99 are lower division (freshman or sophomore) courses; those numbered 100 and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. First semester sophomores who have an average grade of not less than 2.0 grade point and second semester sophomores who have an average grade of not less than 1.5 grade points may enroll in an upper division course provided they were registered in at least twelve units in the preceding semester. It is understood that ordinarily the instructor will be consulted by sophomores wishing to take upper division courses. In such cases an upper division course will count as lower division credit.

Although the College fully expects to carry out the arrangements planned in the list of courses, it reserves the right to make changes.

AGRICULTURE

20. Nature Study.

SKID

A course to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades). May be credited toward natural science only for students majoring in Education.

Fall and Spring (2).

26. Home Floriculture.

SKID

A study of ornamental gardening to familiarize students with materials used in gardening and methods of propagation. A part of the work consists in visits to nurseries, greenhouses, and florists. Especially designed to furnish a part of the equipment needed by those intending to enter nature study and general science. May not be credited toward requirement in natural science.

Fall and Spring (2).

ANTHROPOLOGY

LOWER DIVISION COURSES

50A-50B. Man's Evolutionary History.

R

Origin and antiquity of man. Classification of races. Origin and development of civilization. Prerequisite: Sophomore standing.

Year course (3-3).

A-51B. American Indian Archaeology.

ROGERS

The ancient life of the American Indian, particularly in the Southwest. Theories as to the origin and early migrations of the American Indian peoples and evidences of pre-Columbian civilization in America. Practices of the living peoples studied for explanation of archaeological findings. Class work supplemented by original documentary research in ethnological records of the San Diego Scientific Library, and individual studies in the Indian collections of the San Diego Museum of ethnology.

Year course (3-3). (Not offered in 1932-1933.)

UPPER DIVISION COURSE

9A-150B. Social Anthropology.

ROGERS

The anthropological backgrounds of human society. The biological and cultural heritages of man traced in their earlier phases, and the development of social institutions in primitive groups. The various expressions of primitive mentality in such forms as language, superstition, magic, mythology, art, and empirical science considered in their relation to the subsequent development of civilizations in various parts of the world. A paper embodying the results of original documentary research in the general field of primitive culture required of every student.

Year course (3-3). (Not offered in 1932-1933.)

ART

Preparation for the presecondary major (lower division), required also for the Junior certificate: Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Presecondary major (upper division): Not less than twenty-four units upper division art. These shall include Art 112A, 115A-115B, 150, 1A, 195, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses: English 4A-4B, A-106B, 117; French A-B; History 4A-4B, 111A-111B; Speech Arts 155B, 155A-155B.

LOWER DIVISION COURSES

Art Appreciation and History

Fundamentals.

JACKSON

An illustrated lecture course intended to increase appreciation and give basic understanding of the elements and principles of art as expressed in architecture, painting, sculpture, and crafts of the past and present. Fall and Spring (2).

Appreciation and History.

JACKSON

A survey of the development of painting, sculpture, architecture, and crafts from the dawn of art to the Renaissance, by means of illus-

trated lectures and discussion. (Not open to freshmen, except by special permission.)

Fall (2).

Design

6A. Structure.

M. KELLY, BEN

Fundamentals of design and composition and theory of color. This course used as a prerequisite for all advanced art work.

Fall and Spring (2).

6B. Structure (continued).

M. KELLY, BEN

Original work in creative design with special stress on modern tendencies. Prerequisite: Art 6A.

Fall and Spring (2).

11A. Industrial Design.

M. KE

Problems in creating original designs for decorative and useful articles, jewelry, lamps, and objects that may be made in various materials by hand or machine process. Prerequisite: Art 6A-6B.

Fall (2).

11B. Applied Design.

JACKSON, M. KE

Designing and completion of actual objects by the students. Such processes involved as carving, painting, dyeing, block printing, batik and like. Prerequisites: Art 6A-6B, 11A.

Spring (2).

14A. Lettering.

M. KE

A study of fundamental art principles applied to lettering. Practice for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.

Fall (2).

14B. Posters and Commercial Art.

M. KE

The application of lettering to posters, newspaper and magazine advertising, and other forms of commercial art. The study of composition combined with lettering and special study of modern tendencies in art. Prerequisite: Art 6A, 14A.

Spring (3).

52A. Stage Design.

BEN

Theory of line, color, and lighting in relation to the stage. Original sets and costumes developed on a miniature stage. Study of the development of the modern art of the theater. Upper division credit will be given in this course to students of junior standing upon the completion of extra theme work and additional original problems. Prerequisite: Art 6A.

Fall (3).

94. Costume Design.

M. KE

Original problems in designing modern costumes. A study of line, color, texture, type, and suitability to the wearer and to the occasion; for and historic influence on dress. Prerequisite: Art 6A.

Fall (3).

Drawing and Painting

B. Freehand Drawing.

JACKSON

Semester I: Problems involving perspective to develop ability to draw life, furniture, exteriors, interiors, and the like.

Semester II: Outdoor sketching of landscape and figure, and studio work from still life and costume pose. Emphasis on composition and technique in the handling of various mediums, pencil, pen and ink, charcoal, pastel, and water color.

Year course (2-2).

A-15B. Painting.

JACKSON

Semester I: The representation of still life, flowers, and figure poses in water color and oils.

Semester II: Landscape and figure painting emphasized. Prerequisite: Art A-B.

Year course (2-2).

Crafts

A. Elementary Crafts.

BENTON

Practical problems in elementary craft work, book binding, basketry, weaving, puppetry (including the dramatization and production of a puppet play), and demonstration of such processes as paper making, papier-mache, paper decoration through batik, and the like. Prerequisite: Art 6A when possible.

Fall and Spring (2).

A. Elementary Crafts.

BOREN

Designed to develop creative expression, to gain a certain ability to use simple tools, and some knowledge of suitable materials for elementary crafts. The work covers toys in wood, tin, and the like; elementary clay modeling and pottery; demonstrations of cement mixing and of soldering. The adaptation of these processes to student-conducted activities. Prerequisite: Art 6A when possible.

Fall and Spring (2).

UPPER DIVISION COURSES

Art Appreciation and History

Art Appreciation and History.

POLAND, JACKSON

The period from the Renaissance through the Modern School, treated in the same manner as in Art 50.

Spring (2).

Design

A. Composition.

JACKSON, M. KELLY

Imaginative composition of natural forms in black and white and color. Prerequisites: Art A-B, 6A-6B, 15A.

Fall (2).

B. Illustration.

M. KELLY

Composition fulfilling the requirements of book illustration from poetry, imaginative tales, and legends, in black and white and color. Prerequisite: Art 112A.

Spring (2).

152A. Stage Design.

BENT

See Art 52.

152B. Stage Costume.

M. KEI

Costume studied in relation to drama. Original designs for mood character. Practical problems in designing and decorating costumes and accessories for college production. A brief history of costume from Egyptian to the modern time. Prerequisites: Art 6A, 52.

Spring (3).

152C. Stagecraft.

JON

Stage terminology and technique. Scene building and decoration. Materials and their treatment for stage effects. Experience in setting and lighting college productions. Prerequisite: Art 52 or 152A.

Spring (3).

195. Home Decoration.

BENT

House planning and landscaping. Interior decoration. Study of period styles and modern decoration. Illustrated lectures and original problems. Prerequisites: Art A, 6A.

Spring (3).

Drawing and Painting

115A. Life Drawing.*

Charcoal and pencil drawing from the nude model. Short poses memory training and long poses for drawing and technique.

Fall and Spring (2).

115B. Life Drawing and Painting.*

Drawing and painting from nude and costume models. Prerequisite: Art 115A.

Fall and Spring (2).

115C. Advanced Painting.*

Painting from nude and costume models and advanced composition in oil. Portraiture. Prerequisites: Art 115A, 115B.

ASTRONOMY

Preparation for the major in Astronomy (lower division) required of the junior certificate: Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-4B, Physics 2A-2B and 3A-3B, or 1A-1B and 1C-1D, a reliable knowledge of French or German.

1. Descriptive Astronomy.

SKILL

A cultural course planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature. Especial attention to the methods and instruments by means of which astronomical knowledge has been gained. A six-inch Alvin Clark telescope used for observation. Demonstrations given with a large spectrometer.

* These courses may be taken in extension classes offered by the College, at the Fine Arts Gallery, Balboa Park. Instructor: Mr. Jackson

ter; also a good selection of lantern slides used to illustrate various facts. Prerequisite: Elementary Algebra and Plane Geometry. Fall and Spring (3).

Historic Development of Astronomy.

SKILLING

The leading facts now known in astronomy in the light of circumstances attending their discovery. Prerequisite: Astronomy 1. Fall and Spring (3).

Modern Astronomy.

SKILLING

Stars and nebulae. Modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisite: Astronomy 1 and a knowledge of Physics. Fall and Spring (3).

BIOLOGICAL SCIENCES

(Biology, Botany, Zoology)

General students who wish to take only one or two courses in this department should register for Biology 10A-10B, 114A or 114B (see below for prerequisites for each course).

Preparation for the major in Botany (lower division), required for the bachelor's certificate: Botany 2A, 2B, 4, 5, and Chemistry 1A.

Preparation for the presecondary major in zoology (lower division): Biology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and 5.

Presecondary major in zoology: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, physics, and physiology. (The college now requires two years of work in preparation for the botany major.)

Students preparing to teach science in the junior high school should include in their courses work in zoology, botany, physics, chemistry (at least high school chemistry, and Education 120. The following are also acceptable: geography, geology, anthropology, astronomy, and upper division biological sciences.

Fees: A fee is required in all laboratory courses in this department. (See page 21 for list of fees.) The fee covers the cost of materials used, breakage and extra material in addition to the estimated need and a charge must be made.

BIOLOGY

LOWER DIVISION COURSES

10B. General.

M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in laboratory. Laboratory work supplements the lectures and includes a study of living and preserved material. The aim of the course is to acquaint the student with the basic facts of biology. It is designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and one three-hour laboratory period per week. Designed for those who do not expect

to specialize in zoology or botany, but not open for credit to students who have taken Zoology 1A, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1A or Botany 2A for credit.

Year course (3-3).

BOTANY

LOWER DIVISION COURSES

2A. General.

D. R. HALL

Fundamentals of structure and general behavior of seed plants. Lectures or recitations and two three-hour laboratory periods per week.

Fall (4).

2B. General

D. R. HALL

A continuation of 2A treating morphology and relationship of the plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Spring (4).

4. California Plants.

D. R. HALL

Classification and ecology of representative orders of flowering plants of the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week.

Spring (2). (Offered in even-numbered years.)

5. Trees and Chaparral.

D. R. HALL

Practice in the determination of the important species of the San Diego region. One lecture and three hours laboratory per week, with several Saturday field trips.

Spring (2). (Offered in odd-numbered years.)

7. Plant Physiology.

D. R. HALL

The functions of plants including metabolism, absorption, conduction, transpiration, respiration, growth and movement. One lecture and three-hour laboratory period per week. Prerequisite: Biology 10A or Botany 2A.

Fall (2). (Offered in even-numbered years.)

UPPER DIVISION COURSES

102. Plant Geography.

D. R. HALL

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or 4, or equivalent.

Fall (2). (Offered in odd-numbered years.)

104. Taxonomy.

D. R. HALL

Identification, classification, and distribution of representative orders of flowering plants. Six hours per week of lectures, laboratory, and field work. Prerequisite: Botany 2A-2B, 4.

Spring (3). (Offered in even-numbered years.)

106. Marine Plant Biology.

D. R. HALL

Marine algae of the San Diego region, including a study of structure, development, identification, and distribution. Collecting trips to

rious beaches will be made. One hour lecture and six hours laboratory per week. Prerequisite: A laboratory course in general biology or botany. Spring (2 or 3). (Offered in odd-numbered years.)

3. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of lower division work in the department with a grade of A or B. Fall and spring (1 or 2).

ZOOLOGY

LOWER DIVISION COURSES

General.

HARWOOD

An introduction to animal biology dealing with structure, functions, and evolution of animal life. Laboratory work supplementing the lectures based on the study and observation of living and preserved material. Suitable to the general student as well as to the biology specialist, maintaining one with the fundamental facts and theories of biology as they pertain to animal life. Two lectures or recitations and two three-hour laboratory periods per week. Fall (4).

General.

HARWOOD

A continuation of 1A. The structure, relationships, and classification of the chordates. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A. Spring (4).

UPPER DIVISION COURSES

Embryology.

M. E. JOHNSON

The development of vertebrates as illustrated by the frog, chick and mammal. Six hours of laboratory and one hour of lecture per week. Prerequisite: Zoology 1B or Biology 10B. Spring and Fall (3). (Offered in odd-numbered years.)

Comparative Anatomy of the Vertebrates.

Dissection, study, and comparison of organ systems of typical vertebrates. One hour per week of lecture and six hours of laboratory. Prerequisite: Zoology 1B or Biology 10B. Fall (3). (Offered in odd-numbered years.)

Marine Zoology.

Designed to acquaint the student with the many interesting animals found along the beaches in the San Diego region. Identification, distribution, associations, structure, and to some extent, behavior and life histories of the organisms. Frequent collecting trips to the beach and study of the living animals in the laboratory. Prerequisite: A laboratory course in elementary Biology or Zoology.)

114A. Genetics.

HARW

General introductory course designed to acquaint the student with the fundamental principles of heredity and variation. Special attention given to the Mendelian interpretations of the facts of inheritance. Two lectures per week.

Fall (2).

114B. Evolution.

The development of theories of evolution. Two lectures per week.
Spring (2).

121. Entomology.

HARW

The classification, life history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and three hours of laboratory per week.

Spring (3). (Offered in odd-numbered years.)

113A. Taxonomy and Natural History of the Vertebrates.

HARW

Frequent field trips and the identification of preserved material. One hour of lecture and six hours of laboratory per week. Prerequisite: Zoology 1B or Biology 10B.

Spring (3). (Offered in even-numbered years.)

113B. Ornithology.

The study and identification of birds, especially those of the Pacific coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1B, Biology 10B.

Spring (3). (Offered in odd-numbered years.)

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission only by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of work in the department with a grade of A or B.

Fall and Spring (1 or 2).

CHEMISTRY

Preparation for the presecondary major (lower division) required for the Junior certificate: Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-8, Physics 2A-2B and 3A-3B or the equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in Chemistry to transfer to another college, and there work for a degree with a major in Chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Presecondary major (upper division): A minimum of twenty upper division units in Chemistry including Chemistry 101-102 and 123-124. The choice of a related minor and the organization of the course of the major student must follow a definite plan approved by the department.

LOWER DIVISION COURSES

1B. General Chemistry.

MESSNER, ROBINSON

The general principles and laws of chemistry, and a description of the elements and their compounds. Two lectures, one quiz and two laboratory periods per week. The laboratory work in the second semester consists of work in qualitative analysis. Prerequisites: At least two years of high school mathematics. Recommended: High school chemistry and physics. Year course (5-5).

6B. Introductory Quantitative Analysis.

MESSNER

Determinations by gravimetric, volumetric, and electro-analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture, and two laboratory periods per week. Prerequisite: Chemistry 1A-1B. Year course (3-3).

Organic Chemistry.

ROBINSON

A general consideration of the carbon compounds (both aliphatic and aromatic) and their derivatives; their synthesis, constitution and properties, and the principles involved. Two lectures and one laboratory period per week first semester; one lecture and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B. Year course (3-3).

UPPER DIVISION COURSES

102. Advanced Inorganic Chemistry.

MESSNER

The laws and theories of elementary work from the viewpoint of physical chemistry. Laboratory work covering such topics as gas law, weights, laws of combination, ionization, equilibrium relationships, electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: Chemistry 1A-1B, 6A-6B, and Mathematics 7A-7B or equivalent. Year course (4-4).

106B. Quantitative Analysis.

MESSNER

An upper division course covering the same field as Chemistry 6A-6B including some more advanced work. One lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B. Year course (3-3).

108. Organic Chemistry.

ROBINSON

An upper division course covering the same field as Chemistry 7-8 including some more advanced work. Two lectures and one laboratory period per week first semester; two lectures and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B. Year course (3-4).

Industrial Chemistry.

ROBINSON

An introductory lecture course designed to acquaint the student with the apparatus and unit processes of importance in the industry. A

few typical industrial processes are discussed in detail. Prerequisite: Chemistry 1A-1B and credit or registration in Chemistry 6A-6B and Spring (3).

112. Industrial Analysis.

ROBIN

A laboratory course including the analysis of fuels, petroleum products, water, and gas. Prerequisite: Chemistry 6A-6B. Spring (2).

123-124. Organic Preparations.

ROBIN

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. Laboratory and conferences. Prerequisite: Chemistry 7-8. A reading knowledge of German recommended. Year course (2 to 5-2 to 5).

125. History of Chemistry.

ROBIN

Development of the science of chemistry from the time of the alchemists to the present. Conducted on the reading, report, and seminar basis. Prerequisite: Chemistry 101-102. Fall and Spring (2).

199. Special Topics.

INSTRUCTORS OF THE DEPARTMENT

Supervised individual work in specialized branches of chemistry such as colloid chemistry, biochemistry, applications of the phase rule, etc. Admission only by the consent of the instructor. Hours and credit arranged in each case. Open only to upper division students who have shown their ability to do A or B work in chemistry.

Fall and Spring (1-3).

ECONOMICS

Preparation for the presecondary major in Economics (lower division) required also for the Junior certificate: Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B, 8A-8B; Psychology 1A, 2B; Geography 1 and 2. Recommended: Social Studies 50; Economics 14A-14B, 18A-18B.

Presecondary major (upper division) in Economics, required: Economics 100 and 140, with 9 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171, 194 and 199. Elective: 7 upper division units in general and applied economics; 6 additional upper division units in any combination of general and applied economics and economic geography.

Preparation for the presecondary major in Commerce (lower division) required also for the Junior certificate: Economics 1A-1B, 11, 14A-14B (6 units); English 1A-1B; Geography 1-2; Mathematics 1A and 1B; History 4A-4B or 8A-8B or Political Science 1A-1B.

Presecondary major (upper division) in Commerce, required: Economics 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, and 18 units additional chosen in one of the following groups:

A. Accounting: Economics 160, 161, 162, and 9 units in electives

B. Banking and Finance: Economics 131, 133, 134, 135, and 6 units in electives.

C. Marketing and Merchandising: Economics 123, 125, 171, and 9
its in electives.

Geography 141 may be used in the electives under A, B, C.

LOWER DIVISION COURSES

1B. Principles of Economics.

CAMERON

The basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wages, profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs; transportation corporations, labor problems, socialism, taxation.

Aims of the course: (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and to introduce future citizens to political and economic problems of the time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Year course (3-3).

Economic History of the United States.

WRIGHT

A comprehensive survey of American economic development and of national legislation in the field of industry.

Year course (3).

14B. Accounting.

WRIGHT

Knowledge of bookkeeping not required and not advantageous. The balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting, and closing of books for different types of businesses; organizations, reorganizations, dissolutions, and consolidations; branch stores accounting, etc., keeping in view the best modern accounting practice. Eight hours lecture and laboratory.

Year course (3 or 4-3 or 4).

18B. Commercial Law.

STANTON

The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions, rather than the development of those principles. The subjects covered: contracts, sales, agency, partnerships, corporations, property, negotiable instruments, insurance, and wills, with a brief review of evidence.

Year course (3-3).

UPPER DIVISION COURSES

Modern Economic Thought.

A. G. PETERSON

A critical analysis of the classical doctrine in the light of recent economic theory. A critical analysis of contemporary economic thought. Prerequisite: Economics 13.

Year course (3).

Business Administration.

A. G. PETERSON

Problems of business administration as an interrelated whole and as a indication of lines of study which may lead to the solution of those

problems. A discussion of the problems of the business administrator with particular reference to the character of the problems involved in the control policies and devices of the manager. Questions, problems and case studies. Prerequisite: Economics 1A-1B.

Fall (3).

123. Marketing.

Our distributive organization and its functions, including the marketing of both agricultural and manufactured products. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1932-1933.)

125A. Advertising.

Functions, theory, principles and applications; selecting the appeal; surveys and analyses; studying markets; budgeting the appropriation; layouts, type, borders and illustrations; use of color; choice of mediums; writing publicity and promotion stories; openings, anniversaries, sales and special events; institutional copy; the advertising agency and its functions; sales and collection letters.

Fall (2). (Not offered in 1932-1933.)

125B. Salesmanship.

Salesmanship, the market basket of knowledge; the mechanics of the mind; overcoming fear; the human element in selling; meeting competition; analyzing a sale in advance and methods of using this analysis in consummating a sale; personal attributes; selling an invisible commodity; selling a specialty; retail selling; the steps of a sale. A number of the various crafts will be used in demonstration. Outstanding salesmen will illustrate correct methods of selling.

Spring (2). (Not offered in 1932-1933.)

127. Urban Land Economics.

The development of urban economy, location and structure of urban land utilization, city planning and zoning, taxation, housing, urban land credit and land valuation, with special emphasis upon local conditions. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1932-1933.)

131. Public Finance.

Principles and practice of taxation, public expenditures, and financial administration. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1932-1933.)

133. Corporation Finance.

The corporate form of organization, instruments of long-time financing, methods of raising capital, efficient financial management, and the financing of reorganizations. Prerequisite: Economics 1A-1B.

Fall (3).

134. Investments.

Investment analysis and the investment of personal savings.

Spring (3).

5. Money and Banking.

CAMERON

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A-1B. Fall (3).

6. Statistical Methods.

BROOM

The nature and uses of statistical method in the social sciences. Practice in the tabular and graphical presentation of data; in the computation of averages, ratios and coefficients, measures of dispersion, and measures of relationship. Research studies are made, utilizing data obtained from typical economic and commercial situations, involving percentages, numbers, time series, and business cycles and barometers. Opportunity to obtain practice in the use of calculating machines and other aids to computation. Prerequisite: Two years of high school algebra and Math. 1A. Only two units of credit are available for this course in the case of students who previously have completed Education 140. Spring (3).

7. Personnel Administration.

A. G. PETERSON

Principles of scientific management, labor turnover, selection and placement of personnel, discipline and discharge, methods of wage payment, health and safety, labor participation in management. Prerequisite: Economics 1A-1B. Spring (3). (Not offered in 1932-1933.)

8A-160B. Advanced Accounting.

WRIGHT

An intensive study of the corporation, its accounting and financial statements; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory. Prerequisite: Economics 14A-14B. Year course (3-3).

9. Cost Accounting.

WRIGHT

Principles and methods of cost accounting in the mercantile establishment and in the factory. A study of bookkeeping procedure, the forms used, and their application to practical problems. Prerequisite: Economics 14A-14B. Spring (3). (Not offered in 1932-1933.)

10. Accounting Systems.

WRIGHT

The accounting systems used in various types of business and financial concerns. Some practice in devising and installing systems. Prerequisite: Economics 14A-14B. Spring (3). (Not offered in 1932-1933.)

11. Machine Accounting.

WRIGHT

The application of mechanical accounting devices to accounting concerns together with a study of efficient machine methods that conform to good accounting practice and yet meet the practical accounting requirements that are found in many classes of business. In addition

to a thorough study of machine installations, the course requires considerable practice in the operation of standard accounting machine.
Prerequisite: Economics 14A-14B.

Fall (3). (Not offered in 1932-1933.)

171. Transportation.

CAMEE

The development of railway transportation; railroad financing; rates and rate making; government regulation; government operation of roads during the war; recent development of motor and air transportation; current problems. Prerequisite: Economics 1A-1B.

Spring (3).

194. International Economic Relations.

A. G. PETERS

A brief treatment of certain geographical, sociological, and legal phases of international relations followed by a study of the commercial and industrial basis of world economy touching upon a number of special problems involved and supplemented by an introductory study of materials covering the processes, principles, and policies of international trade.

The course concerns itself primarily with the economic basis of international relations, but political aspects are almost constantly taken into account in recognition of the fact that international relations are frequently political in form but economic in content.

Spring (3).

199. Special Study.

THE ST

Designed exclusively for seniors with a major in economics or commerce.

Spring (2).

Economic Geography

(See Geography)

Social Economics

LOWER DIVISION COURSES

A. Social Ethics.

Required of all entering students. A course aimed to place the student in contact with ways and means of knowing the fundamental principles of good breeding and social usage. It deals particularly with the relations of women to society—of men to society. One hour per week for 9 weeks.

Fall and Spring. No credit.

1. Orientation.

A. G. PETERS

The objectives of curricular and extra-curricular activities; vocational and educational guidance and planning; how to study; introduction to contemporary civilization. Required of all freshmen who are candidates for the junior certificate or the degree in the presecondary curricula.

Fall and Spring (1).

10. Introduction to Social Science.

A. G. PETERS

An introduction to college objectives and college problems followed by a study of man's descent, race, social organizations, ideals of conduct,

ilization. Modern problems. Required of all freshmen who are candidates for a degree in teacher training.
Fall and Spring (3).

General Sociology.

G. KELLY

A study of the nature and organization of human group activity, including the relation of cultural heritage to public opinion and social change. Previous preparation in biology and psychology recommended.
Fall and Spring (3).

Social Psychology

(See Psychology)

Secretarial Training

Business Mathematics.

WRIGHT

A practical course in the mathematics of business. Development of the ability to add, subtract, and divide rapidly and accurately. A thorough study of interest, compound interest, discount, amortization tables, insurance rates, etc.
Fall (1).

1B. Typewriting.

AMSDEN

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of typewritten material with special reference to commercial forms, tabulation, billing; specifications, legal forms, and preparation of manuscripts; description, mimeographing, etc. Ordinarily no credit given for this course except in the curricula in accountancy and secretarial training. Five hours lecture and laboratory practice.
Fall course (3-3).

Typewriting.

AMSDEN

A short course designed for those not wishing to enter the business office desiring a knowledge of the use of the typewriter. Five hours laboratory practice.
Fall (2).

Office Methods and Appliances.

WRIGHT

Practice and principles of office management, including organization, management, and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and book-binding machines. Trips made to local establishments to study at first hand actual business conditions. Prerequisite: Secretarial Training 1A or equivalent.
Fall (3).

3. Stenography.

AMSDEN

An intensive course designed for the practical preparation of office secretaries. A thorough study of the Gregg System. Development of the ability to read and write shorthand rapidly and correctly, both literary and commercial. The shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit given
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for this course except in the curricula in accountancy and secretarial training.

Year course (5-5).

6A. Advanced Stenography.

AM

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary material.

Fall (3).

EDUCATION

LOWER DIVISION COURSES

1. Education—Introductory Principles.

BACON, DEB

An orientation course in professional education. A preliminary survey covering briefly the historical and philosophical background of the modern public school and culminating in a consideration of modern educational practice, with special reference to public and quasi public organizations which more or less directly participate in the program of education.

Fall and Spring (3).

17. Music in the Elementary School.

L. D. SM

Main objectives of music teaching in the public elementary school. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, singing, and part singing. Conducting. Prerequisite: Music 1A, or equivalent.

Fall and Spring (2).

19. Art in the Elementary School.

BENTON, M. K.

Discussion of the elements and principles of art and their place in art expression and appreciation of the elementary school child. Lectures illustrated with examples of children's work and opportunity given for experience with mediums used in elementary school problems. Prerequisite: Art 6A.

Fall and Spring (2).

UPPER DIVISION COURSES

106. Philosophy of Education.

The fundamental biological, psychological, philosophical, social principles underlying modern education, in connection with the demands of modern society in a complex social, economic, and scientific world, with a view to the formulation of a working philosophy for the educative process. Designed as a culmination of the studies of education and its procedure. Open only to students with senior standing.

Spring (3).

107. History of Education.

A brief study of early Hebrew, Greek, Roman and early Christian education; of the changes brought about by the Renaissance; of the transition to modern secular education; brief reviews of the educational philosophy of the great reformers; a concluding study of the development of the American school system and of American ideals and practices in education. Only 2 units allowed for students having credit for Education 106.

History of Education in the United States (offered in the summer session).
Fall (3).

8. Educational Measurements.

BROOM

A brief survey of the development of scientific measurement in the elementary school field, including an intensive study of the more reliable and valid tests of school achievement and of mental ability. Statistical training given in handling data obtained by using measurements in typical school situations, leading to a study of the uses of tests. Practice in the construction of teacher-made, objective tests in the elementary school subjects. Open only to students who have passed the Fundamentals Test.
Fall and Spring (3).

9. Educational Administration and Supervision.

BROOM, HARDY

A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc. Prerequisites: Education 125B, 108 or equivalents.
Spring (2).

10. Educational Organization and Supervision.

BROOM

Types of supervision and methods of evaluating and improving teaching. Prerequisites: Education 125B, 108 or equivalents.
Spring (2).

11. English in the Junior High School.

BAGLEY

Objectives of literature and language teaching in the junior high school; criteria for selection of material; technique of classroom procedure; variation in the city schools. Prerequisite: The satisfaction of the senior division requirements in English for the teaching major in English.
Spring (2).

12. Mathematics in the Junior High School.

RICHARDS

The subject matter, management of it, and methods of teaching it in a junior or high school curriculum in general mathematics. Specific problems; application of arithmetic in current social and business life, intuitive geometry, graphic representation, the phase of algebra suitable to the junior or high school pupil, preparation for senior high school mathematics. Prerequisites: Psychology 1A and a passing grade in the Fundamentals.
Spring (2).

13. Social Science in the Junior High School.

NIDA

The teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior or high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography, and civics. Methods of developing a genuine and continuing interest in social and world problems through observation and reading, discussed and illustrated. Emphasis on evaluating historical and geographical material for its relative stress on evaluating historical and geographical material for its relative purposes on this level. Prerequisites: Four units of geography and six units of history.
Fall (2).

116. Practice Teaching.

AULT AND SUPERVIS

Systematic observation, participation, and actual teaching under competent supervision in the Training School and in the city schools of Diego. The general plan for a student who has not had teaching experience is to take one period of practice teaching daily for a semester, two periods daily for another. In some cases the second assignment for a half day. Only in case of an extreme emergency will a student who has not had experience in teaching be permitted to satisfy all practice teaching requirements in a single semester. It is planned to distribute the practice teaching assignments so that the student will have some experience in both upper and lower grades, with the emphasis on the grade or grades in which the student is particularly interested. Deviation from this plan is very liable to result in unsatisfactory training and is tolerated only when unavoidable.

One period of teaching daily for a semester is usually credited with two or three units and two periods with four to six units, depending upon the character of the assignment and the work. When more time is needed the student is assigned to additional practice.

The practice teaching requirements of a minimum of eight units and a maximum of twelve units are usually reduced for those who have had successful teaching experience. The usual requirement for inexperienced teachers is nine units. Practice teaching credit is usually reduced to four units by the universities. Students planning to transfer to other institutions should be prepared to meet this reduction with an equivalent amount of acceptable units in other subjects.

Prerequisites: Passing grade in Fundamentals Test and completion of 75 units of college work; C average in all college work and in work of the preceding semester; three units of credit in Psychology and six units of credit in Education. No credit will be given for this course until registration is made in the office of the Dean of Education.

119. Art in the Junior High School.

BEN

Art curriculum planning for junior high schools and studio problems and discussion. Prerequisite: Education 19.

Spring (2).

120A. Biological Sciences in the Junior High School.

M. E. JOHN

The content, methods, field work, textbooks, laboratory work, equipment, and reference reading for junior high school biological sciences. Prerequisite: Eighteen units of college science including Biology 10A or Zoology 1A-1B and Botany 2A-2B.

Fall (2).

120B. Physical Sciences in the Junior High School.

SKILL

The content, methods, field work, textbooks, laboratory work, equipment, and reference reading for junior high school physical sciences. Prerequisite: Eighteen units of college science including Physics 2A or equivalent and high school or college chemistry.

Spring (2).

121. Principles of Secondary Education.

The principles of educational science that should underlie the organization, administration and curriculum of the secondary school. Pre

patterns of high school education; tendencies in the direction of future development. Particular attention to the method of directing learning in the secondary schools. Prerequisites: Psychology 1A and Education 1, or equivalents. Open only to students with senior standing. Fall and Spring (2).

Romance Languages in the Junior High School.

BROWN

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value. Prerequisite: Two years of college French or Spanish.

2.) (Not offered in 1932-1933.)

4. Curricular Activities—Lower Levels.

HAMMACK

Units of work; characteristics of children in the primary grades; organization of the activity program, activities and materials based on children's interests and need through the local environment; teaching learning procedures for acquiring basic abilities, reading, language, writing, use of numbers; observation and participation in actual classroom situations. No credit for those who have had Education 128.

Candidates for the Elementary Credential are required to take both Education 125A and 125B, preferably in the order listed. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (3).

5. Curricular Activities—Upper Levels.

DEPUTY. SMOOR

Units of work; characteristics of children in middle and upper grades; organization of the program in terms of children's interests and capacities; techniques of developing abilities in reading, use of numbers and language expression; investigations of methods and materials of the studies; observation of typical teaching procedures. No credit for those who have had Education 104. See note under Education 125A concerning these two courses. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (3).

Children's Literature.

CORBETT

The principles of selection underlying the choice of literature for the elementary school, with special emphasis on the social and educational needs of the child. Source material and its classification. A critical selection and evaluation of new literary materials for children's use. A discussion of the best illustrators of books for children. Practice in developing technique in story telling through practical work in Story Telling.

Fall and Spring (2).

Music in the Secondary School.

L. D. SMITH

The objectives of music teaching in the public secondary schools. Organization of the chorus and glee clubs, voice testing, seating, a survey of materials available. Organization of courses in applied music, theory, history and appreciation. Prerequisite: Education 17.

Fall (2).

129. Mathematics in the Elementary School.

RICHARD

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics together with study and observation of the newer methods as used under ordinary classroom conditions. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (2).

130. Educational Psychology.

BROOKS

Man's equipment for learning and the learning process. Consideration given to human behavior which is fundamental to learning. The study of learning includes such topics as laws of learning, improvement in learning, remembering and forgetting, fatigue in learning, and transfer of training. Prerequisite: Psychology 1A.

Spring (3).

137. Comparative Education.

ANDERSON

School systems of England, France, Germany, and Denmark; traits of peoples; origin and development of school systems; literacy of populations; traditional influences; characteristic types of schools and educational procedures; governmental and private support; training of teachers.

An upper division course open only to students who have had Education 1. A knowledge of History of Education desirable but not required.

Fall (3).

140. Elementary Educational Statistics.

BROOKS

An introductory study of measures of central tendency, of variability, and of relationship which are commonly used in connection with educational work. Laboratory training in statistical method and opportunity to obtain practice in the use of calculating machines and other aids to computation. Data for statistical research taken from typical school situations. Only 2 units allowed students who have taken Economics 1.

Fall (3).

145. Organization and Administration of Music Education.

L. D. SMITH

Theory of the general principles of music administration; correlation of music with the various subjects in the public schools; music teaching as creative work. Prerequisite: Education 17.

Fall (2). (Offered in even-numbered years.)

160. Vocational Education.

WRIGHT

Aims and objectives of vocational education of less than college grade.

Spring (3). (Not offered in 1932-1933.)

161. Junior Business Training.

WRIGHT

The methods and content of the course in the elements of business training as offered in the junior high school. Not open for credit to those who have taken Secretarial Training 3A.

Spring (2).

163. Stenography.

AMSON

Methods and content of courses in stenography.

Spring (2).

1. Bookkeeping.

WRIGHT

Various types of bookkeeping method, with considerable study of intent.

Fall (2).

2. Typewriting.

AMSDEN

Methods in typewriting and office procedure.

Spring (2).

3. Visual Aids in Education.

EVANS

Psychological principles underlying the use of visual aids in education; the sphere of the visual method; materials classified as visual aids; guiding principles in the selection of pictures and methods of using visual aids. Practical laboratory experience in the work of a supervisor in selecting, organizing, distributing, and evaluating visual aids and in demonstrations to teachers; the care and operation of projectors and photographic laboratory equipment.

This course is given at the visual education center of the San Diego city schools and the enrollment is limited to students who have made previous arrangements with the head of the education department and with the instructor.

Fall and Spring (2).

4. Educational Problems.

EDUCATION STAFF

(Dean of Education in Charge)

A course for senior students in teacher training who have shown ability to work independently on educational problems. Admission only by consent of the staff. Credit and hours to be arranged.

Fall and Spring (1-3).

ENGLISH

Preparation for the presecondary major (lower division), required also for the Junior certificate: English 1A-1B and nine units from 12A-12B, 15A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

Presecondary major in English—Required: Forty-two units in English, of which six lower division units may be in journalism and speech arts and three upper division units may be in composition. At least eighteen units in upper division courses must be completed in the junior and senior years.

LOWER DIVISION COURSES

-1B. Composition.

ADAMS, BAGLEY, PFAFF, ROGERS, F. L. SMITH, F. D. WALKER

A. A course in writing directed to a mastery of technical correctness and a training in the organization of material. 1B. Practice in effective writing based on extensive reading of modern literature.

A classification test in Subject A must be taken before admission.

Year course, beginning Fall and Spring (3-3).

-4B. Great Books.

OUTCALT

A survey of books and bodies of literature that are significant sources or expressions of European and American culture. These include the Hebrew

Bible, Greek Epic and Tragedy, Norse Eddas, and other literature religious and communal character; and highly significant masterpieces of poetry and prose by great authors down to the nineteenth century.

Year course (3-3).

10. Recreational Reading.

F. L. SMITH

Development of personal tastes for leisure time reading through lectures and oral or written reports. May be taken a second time with new material.

Fall and Spring (1).

12A-12B. Modern Prose: Nonfiction.

F. D. WALSH

Semester I: Studies in scientific, social, and cultural thought in England and in America since 1850. Reading from selected books by some representative authors as Darwin, Huxley, Carlyle, Newman, Herbert Adams, Mark Twain, Walter Lippmann. Discussions and reports. Semester II: A survey of the trends in recent biography based upon reading in nineteenth and twentieth centuries. Lectures, discussions, and reports.

Year course (3-3).

52A-52B. Types of Literature.

OUTCROFT

Semester I: Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems. Semester II: Introduction to the study of dramatic poetry and prose, the essay, novel and short story; elements, principles and characteristics; examples.

Year course (3-3).

56A-56B. Survey of English Literature.

BAGLEY, ADAMS

The most important masterpieces of English literature from the Anglo-Saxon period through the Victorian age.

Year course (3-3).

UPPER DIVISION COURSES

101. Modern Prose Fiction.

OUTCROFT

Recent and contemporary fiction in drama, novel, and short story, beginning with Meredith and including the best British and American fiction of today.

Spring (3).

106A-106B. Advanced Composition.

F. L. SMITH

A laboratory course in modern prose writing. Semester I: Art of narrative, with description. The short story. Semester II: The essay, the magazine article, criticism. Outside readings. Prerequisite: one year of college composition.

Year course (3-3). (Either semester may be taken first.)

116. Elizabethan Literature.

ADAMS

An introduction to the principal writers from Wyatt and More to Jonson and Bacon. Approximately equal attention is given to the dramatic poetry, the prose, and the drama of the period.

Spring (3).

17. Shakespeare.

OUTCALT

Extensive reading of Shakespeare's plays, with special attention to a select group of the comedies and another of the tragedies. Lectures and special reports.

Fall (3).

18. Makers of Eighteenth Century Literature.

BAGLEY

Pope, Defoe, Swift, Johnson, Goldsmith, Fielding, and their contemporaries as interpreters and teachers of their age.

Spring (3).

19. The Romantic Poets.

ADAMS

A study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

Fall (3).

20. Poetry of the Victorian Period.

F. D. WALKER

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

Spring (3).

21. Recent American Literature.

OUTCALT

A survey of American literature with its backgrounds from the Civil War to the present time. Extensive reading in recent poetry, fiction, etc. Lectures, discussion, and reports.

Spring (3).

22. The Development of the English Novel.

F. D. WALKER

History of the English novel from the beginnings to Hardy. Extensive reading of novels with reports. Lectures and discussion.

Fall (3).

23. Mediaeval Literature.

BAGLEY

The literature of the fourteenth century, especially the verse romances and the poetry of Chaucer.

Fall (3).

24. Milton and Dryden.

ADAMS

Studies in the poetry of the seventeenth century, relating it to the thought and the social life of the age.

Spring (3).

JOURNALISM

(See page 83.)

SPEECH ARTS

(See page 97.)

FOREIGN LANGUAGES

Preparation for the major in a foreign language (lower division) required for the Junior certificate: Sixteen units of credit in the language chosen for the major. Recommended: History 4A-4B, Geography 118.

Preparation for the presecondary group major in Romanic language (lower division): French A-B, C-D, and Spanish A-B, C-D.

The group major requirements are based on the assumption that student will have taken courses in the high school equivalent to the college course in elementary French or Spanish. A student who offers matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for third semester of the college course.

Presecondary group major (upper division). Eighteen upper division units in one language or twelve units in one language and six units in other.

French

LOWER DIVISION COURSES

A-B. Elementary.

E. M. BROWN, CRAMER, PHILLIPS

Intensive study of French grammar and syntax; daily written work discussed in class; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of French prosody, with memory work. Credit not given for French A unless followed by French B. Students who have had one year of French in high school should register for French A, but will receive only two units of credit. Those who have had two years of French in high school should register for French B, in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

E. M. BROWN, L. P. BROWN

Reading and composition; study of standard prose as a basis for class work; collateral reading with résumés and written reports in French; study of French prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences. Prerequisite: French B or three years of high school French, or its equivalent. Students with credit for four years of high school French, or its equivalent, should enter French D.

Year course (3-3).

SC. Scientific.

CRAMER

Readings taken from the fields of chemistry, physics, medicine, zoology, biology, etc. Outside readings of books and periodicals. Oral and written reports.

Fall (2).

UPPER DIVISION COURSES

101A-101B. Conversation and Composition.

E. M. BROWN

Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1932-1933.)

A-105B. Modern French Drama.

E. M. BROWN

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, Her-
rix, Maeterlinck, Rostand, and others read and discussed as to subject
matter and technique. Outside reading and reports. Prerequisite:
French D, or its equivalent, with grade of C.
Year course (3-3). (Not offered in 1932-1933.)

A-110B. Modern French Novel.

E. M. BROWN

Study of the French novel from Victor Hugo to the present day,
including such authors as: Hugo, Dumas, Stendhal, Balzac, Flaubert,
Turgenev, Anatole France, Bourget, Bordeaux, Bazin, Barres, Romain Rol-
lan, A. Gide, Marcel Proust, and others. Class and outside reading and
reports. Prerequisite: French D or its equivalent, with grade of C.
Year course (3-3).

German

LOWER DIVISION COURSES

I. Elementary.

CRAMER, H. K. WALKER

Pronunciation, reading and grammar, with practice in simple conversa-
tion, narration and description, both oral and written. Credit not
given for German A unless followed by German B. Students who have
completed one year of German in high school should register for German A,
and will receive only two units of credit. Those who have had two years
of German in high school should register for German B, in which case
they will receive four units of credit.
Year course (5-5).

II. Intermediate.

CRAMER

Reading and composition; study of standard prose as basis for class
discussion; collateral reading with written reports; German conversation,
with the texts read as a basis; dictation. Prerequisite: German B or
three years high school German, or its equivalent. Students with credit
for four years high school German, or its equivalent, should enter
German D.
Year course (3-3).

SD. Scientific.

CRAMER

Full semester. Readings in scientific reader on chemistry, physics, etc.;
optional written reports on scientific subjects read outside of class;
intensive reading. Spring semester. Readings in special scientific or tech-
nical works; weekly written reports required; sight reading. Pre-
requisite: German SC-German B with a grade of C or three years of
high school German; German SD-German C with a grade of C or four
years of high school German.
Year course (2-2).

Spanish

LOWER DIVISION COURSES

I. Elementary.

L. P. BROWN, PHILLIPS

Intensive study of Spanish grammar and syntax, with daily written
reports; class drill in conversational idiom and pronunciation; reading with

oral discussion and resúmenes; dictation; introduction to contemporary prose writers; study of the principles of Spanish prosody, with memorization of work. Credit not given for Spanish A unless followed by Spanish B. Students who have had one year of Spanish in high school should register for Spanish A, but will receive only two units of credit. Those who have had two years of Spanish in high school should register for Spanish B, in which case they will receive four units of credit.

Year course, beginning either Fall or Spring (5-5).

C-D. Intermediate.

PHILIP

Reading and composition: study of standard prose as basis for composition work; collateral reading in prose and drama, with written reports. Spanish: a study of Spanish prosody, with selections for memorization and dictation. Class work conducted mainly in Spanish. Individual conferences. Prerequisite: Spanish B or three years of high school Spanish or its equivalent. Students with credit for four years of high school Spanish, or its equivalent, should enter Spanish D.

Year course (3-3).

UPPER DIVISION COURSES

101A-101B. Conversation and Composition.

L. P. BROOKS

Prerequisite: Spanish D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1932-1933.)

102A-102B. Introduction to Spanish Classics.

L. P. BROOKS

Reading from several types of classical literature. *Lazarillo de Tormes* and other novels of *Roguería*; one drama each from the works of *Lope de Vega*, *Calderón*, *Alarcón*, and *Moreto*; selections from *Don Quixote* and the *Cien Mejores Poesías Castellanas*; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Not offered in 1932-1933.)

105A-105B. Modern Spanish Drama.

L. P. BROOKS

The development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3).

110A-110B. Novel and Short Story in Spain.

L. P. BROOKS

The development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Not offered in 1932-1933.)

General Language

LOWER DIVISION COURSE

A. Latin and Greek Word Derivation.

L. P. BROOKS

A general and elementary course in philology. Latin and Greek roots of most frequent occurrence in English. Interrelations and development of meaning of the different words in English derived from the given roots. Not open to freshmen.

Spring (2).

GEOGRAPHY

Preparation for the presecondary major in Geography (lower division), required also for the Junior certificate; Geography 1, 2, 3, and Geology 1-1B. Recommended: A reading knowledge of French or German.

Presecondary major (upper division): Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

LOWER DIVISION COURSES

1A. Introduction to Geography; Elements. BROOKS, CLARK, SUHL

The fundamental principles of geography, the distribution of life upon the earth, and the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources, and location in their relation to human activities. Open to all students.

Geography 1, Fall and Spring (3).

Geography 1A, Fall and Spring (2).

2A. Introduction; Natural Regions and the Distribution of Population and of Cultures. CLARK, SUHL

The application of the fundamental principles of geography to the various regions of the world. Comparison of regions with regard to different stages of development. Prerequisite: Geography 1 or 1A.

Geography 2, Fall and Spring (3).

Geography 2A, Fall and Spring (2).

Elementary Meteorology. BLAKE

An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments, and records.

Fall and Spring (3).

UPPER DIVISION COURSES

3. Climatology. BLAKE

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention given to the climate of different parts of the United States. Prerequisite: Geography 3.

Spring (3). (Not offered in 1932-1933.)

4. Geography of South America. CLARK

The climate, topography, and natural resources of the South American countries; the effect of those physical factors upon the economic, commercial, and racial problems of the different nations. Prerequisite: Geography 1 or 1A.

Spring (3).

5. Geography of Northwestern Europe. CLARK

The physical environment of each of the nations of the area and their relations to physical environment in their political and social relations. Importance of the countries in manufactures. This course is planned to familiarize the student with modern European countries that he

can read current periodical literature with understanding and interest.
Prerequisite: Geography 1 or 1A.

Fall (3).

118. Geography of the Mediterranean Area.

CL

A treatment of Southern Europe, Western Asia, and Northern Africa as a unit and a comparison of the land forms, climates, types of natural vegetation, cultivated crops, industrial status, and present world position. Also the effect of geographic factors on the history of the area.
Prerequisite: Geography 1 or 1A.

Spring (3).

121. Geography of North America.

St

The natural regions of North America, their formation and economic and historical development. Prerequisite: Geography 1 or 1A.

Fall (3).

124. Geography of Asia.

St

The cultural regions of Asia, their physical environment, and historical development. Prerequisite: Geography 1 or 1A.

Spring (3).

135A. Geography of the San Diego Area: Rural.

CL

Problems in land utilization. Independent regional field work required.
Prerequisites: Geography 1 and 2 and Geology 1A.

Spring (2). For students majoring in Geography only.

135B. Geography of the San Diego Area: Urban.

St

Problems in urban development. Prerequisites: Geography 1, 2 and Geology 1A.

Fall (2). For students majoring in Geography only.

141. Economic Geography.

St

A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 or 1A and 2 or 2A.

Fall (3).

GEOLOGY

LOWER DIVISION COURSES

1A. General.

BRO

Materials of the earth; their composition, distribution, and modification through processes both mechanical and chemical, operating upon and within the earth, with the production of varied surface conditions. Three lectures and one two-hour laboratory period weekly.

Fall and Spring (3).

1B. Historical.

BRO

Geological history of the earth from time of probable origin to the present as interpreted through lithologic and paleontologic sequences with especial attention to North America as illustrative of earth evolution. Three lectures and one two-hour laboratory period weekly.
Prerequisite: Geology 1A.

Fall and Spring (3).

UPPER DIVISION COURSES

1C. Field Geology.

BROOKS

Field work in adjacent areas. Geologic reconnaissance, construction of the topographic map, and elements of geologic mapping. Prerequisite: Geology 1A and 1B.

Fall and Spring (1).

1D. Directed Reading.

BROOKS

Informal geologic discussion to which each student contributes weekly on outside reading of his own choice following any of the several phases of the subject. Prerequisite: Geology 1A and 1B.

Fall and Spring (1).

GERMAN

(See Foreign Languages)

HEALTH AND PHYSICAL EDUCATION

(See Physical Education)

HISTORY

Preparation for the presecondary major in history (lower division), required also for the Junior certificate: History 4A-4B, 5A-5B, or 8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-5B.

Presecondary major (upper division): Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. In addition, the student must, in his senior year, enroll in History 199, in connection with which he will write a paper, the subject matter to be arranged in consultation with the instructor.

LOWER DIVISION COURSES

4B. History of Modern Europe.

LESLEY

Development of European society and institutions from about 1500 A.D. to the present time.

Year course (3-3).

5B. History of England.

NASATIR

The more important political, constitutional, and cultural phases of English development. The purpose of this course is to convey a good working knowledge of English history and to provide a survey of the part the Anglo-Saxon race has played in world history.

Year course (3-3).

8B. History of the Americas.

NASATIR

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis on the process of planting European civilization in the new world, the international contest for the

continents, the wars for independence, the development of the American republics, and their relations with each other and with the rest of the world. Based on H. E. Bolton's "Syllabus of the History of the Americas."

Year course (3-3).

UPPER DIVISION COURSES

111A-111B. Ancient History.

LES

Semester I: Social, economic, political, and cultural development of the Greek states with emphasis upon the growth of democracy, attempt at federal union, imperialism, and Hellenism. Semester II: Roman history from the earliest times to the beginning of the medieval period; discussions of Roman imperialism and the main constitutional, economic, social, and religious developments in the republic and the empire.

Year course (3-3). (Not offered in 1932-1933.)

121A-121B. Medieval History.

LES

General survey of European politics and the cultural development of the Middle Ages; the antecedents of the renaissance; development of medieval life and institutions, feudalism, the church, the universities, and intellectual tendencies. The rise of towns, of new nations, and of new thought especially in the twelfth and thirteenth centuries. Period covered 500-1500 A. D.

Year course (3-3).

145A-145B. Europe Since 1789.

LES

Revolutionary era; conflict of reaction and liberalism; development of nationalism, with special attention devoted to the unification of Germany and Italy; events leading up to the World War and contemporary problems of Europe resulting from that conflict.

Year course (3-3).

146A-146B. Diplomatic History of Europe.

LES

European diplomatic and colonial policies since 1648, with detailed attention to the basic factors in international organization and procedure. During the second semester special emphasis upon the period 1870-1914.

Year course (3-3). (Not offered in 1932-1933.)

156A-156B. History of British Expansion.

NASA

A study of the growth, development, and break-up of the older overseas empire; the beginnings of the newer empire after 1783; the rise, federation, and imperial relations of the self-governing dominions; the crown colony system; India under British rule; and British expansion in Africa and the Pacific.

Year course (3-3). (Not offered in 1932-1933.)

161. South America Since Independence.

NASA

A study of the republics of South America. Attention directed to development of nationality in South America, the struggles for political stability, the exploitation of resources, diplomatic and commercial relations with the United States, and other international problems of South America.

merica. Survey of present-day conditions, political, economic, and social.

Spring (3).

13. Mexico and the Caribbean Countries.

NASATIR

Same plan in general as outlined in History 161. Special attention to the relations of the United States with these countries, and to the recent developments in Mexico.

Fall (3).

1A-171B. The Rise of the American Nation.

LEONARD

Semester I. English colonization in North America and the development of colonial institutions and politics. Semester II. The revolutionary movement and the Revolutionary War; the establishment of the government under the constitution to about 1820. The completion of both semesters of this course meets the requirement on the United States constitution, for graduation.

Year course (3-3).

3A-173B. The Expansion of the United States.

LEONARD

The rise of Jacksonian Democracy; territorial expansion and the Mexican War; the slavery controversy; the Civil War, and reconstruction; the growth and progress of the United States to the World War. The completion of both semesters of this course meets the requirement on the United States Constitution, for graduation.

Year course (3-3). (Not offered in 1932-1933.)

4A-181B. History of the West.

NASATIR

History of European expansion in North America. Emphasis upon the territorial growth of the United States; the diplomacy and politics of expansion, settlement, and development of the West.

Year course (3-3). (Not offered in 1932-1933.)

5. Special Course for Advanced Students.

LEONARD

Required of all students with a history major in the presecondary curriculum, and to be attended during the senior year. Other students interested in history may be admitted with the permission of the instructor.

Spring (2).

HYGIENE

LOWER DIVISION COURSES

Personal and Civic (Men).

C. E. PETERSON

An informational course in personal and community hygiene required of all men in the freshman year. A study of social hygiene and the hygienic principles of living. Investigations by each student of special topics which serve to vitalize the means for protecting and improving the health of the community. Required of all freshmen who are candidates for the junior certificate or the degree in the presecondary curricula.

Fall and Spring (1).

Personal and Civic (Women).

TANNER

An informational course reviewing the principles underlying the movement and preservation of personal and civic health. Social

hygiene in its relations to the practical problems of young women a prospective home makers. The laws and procedures in local civic health matters of particular interest to women studied in detail. Reports following personal investigation of at least three major topics required of each member, these reports being given and discussed before the class. Required of all freshmen who are candidates for the junior certificate or the degree in the presecondary curricula.

Fall and Spring (2).

INDUSTRIAL ARTS

LOWER DIVISION COURSES

3A. Mechanical Drawing. NID

Use and care of drafting instruments, lettering, orthographic projections, developments, intersections, tracings. Drafting room nine hours per week.

Spring (3).

21. Descriptive Geometry. WALL

Fundamental principles of descriptive geometry and their application to problems of engineering. Lectures and drafting. Prerequisite: Industrial Arts 3A, and sophomore standing.

Fall (3).

22. Machine Drawing. WALL

Design and drawing of simple machine parts with emphasis upon production of standard drawings. Lectures and drafting. Prerequisite: Industrial Arts 21.

Spring (3).

23. Materials of Construction. WALL

Structural properties and adaptability of materials used in engineering. Lectures. Open to sophomores.

Spring (2).

25. Elements of Electrical Engineering. WALL

Mathematical and descriptive consideration of electrical circuits together with a general survey of the electrical industry. Lectures. Prerequisite: Mathematics 4A or 14A.

Spring (3).

28. Elements of Heat Power Engineering. WALL

Fundamental consideration of fuels, combustion, steam, boilers, turbines, furnaces, chimneys, steam engines, steam turbines and auxiliaries, internal combustion engines. Lectures. Prerequisite: Mathematics 3B, Physics 1B. Primarily for engineering students other than mechanical or electrical.

Fall (3).

29. Elements of Radio Communication. WALL

Theory and characteristics of fundamental radio circuits. The theory and characteristics of the vacuum tube as detector, amplifier, and oscillator.

ator of alternating current power. Lectures. Prerequisites: Physics 1, Mathematics 4A or 14A or enrollment in those courses.
Fall (3).

NOTE.—Both Industrial Arts 28 and 29 will not be given the same year. The course with the greater demand will be the one given.

JOURNALISM

Preparation for the major in Journalism (lower division) required for junior certificate: History 4A-4B or 8A-8B, Psychology 1A-2B, Secretarial Training 2A, Political Science 1A-1B, Economics 1A-1B, English 1B, 52A-52B, Journalism 51A-51B. Recommended: English 60, Speech Arts 1A-1B, Social Economics 50, Anthropology 50A-50B, Economics 18A-18B, Journalism 53A-53B.

The aim in the course in Journalism is to offer introductory training in the principles and practice of journalistic writing only after a good foundation in correct speaking and writing of English has been laid, and to prepare for the necessarily broad field of the profession of Journalism by introductory work in as many of the fields of literature, history, political science, social science, economics, the arts, etc., as is possible. Technical training in news reporting and editing for student publications and for the daily press is emphasized.

LOWER DIVISION COURSES

Journalism 51A-51B. News Gathering and Reporting. F. L. SMITH
Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. Course planned for sophomores who have had English 1A-1B, with high school Journalism or equivalent.
Fall course (3-3).

Journalism 53A-53B. Applied Journalism. F. L. SMITH
Credit earned for editorial or other staff work throughout a full semester on student publications such as *The Aztec*, *El Palenque*, *Del Sudoeste*.
Fall and Spring (1 to 3-1 to 3).

UPPER DIVISION COURSES

Journalism 100. News and Manuscript Editing. F. L. SMITH
Practice in copy reading, proof reading, headline writing, and newspaper layout. Study of editorial columns. Prerequisite: Journalism 51A-51B or equivalent in composition.
Spring (3). (Not offered in 1932-1933.)

Journalism 153A-153B. Advanced Journalism Practice. F. L. SMITH
Upper division work of the same type as that in 53A-53B, but with increased requirements.
Fall and Spring (1 to 3-1 to 3).

NOTE.—Not more than six units in all will be given for journalism credit on student publications.

MATHEMATICS

Preparation for the presecondary major (lower division), required for the junior certificate: Mathematics 3A-3B, 4A-4B. With permission of the department, 7A-7B may replace 3A-3B, and 14A may replace 4A-4B. Recommended: Physics, Surveying, Descriptive Geometry, Astronomy and a reading knowledge of French and German.

Presecondary major (upper division): Twenty-four units of upper division work in mathematics, or eighteen units in mathematics and units in closely related subjects, arranged in consultation with the chairman of the department. Mathematics 111, 112, and 119 should be included in every major, except that students who have taken 14B need not take 119. Related courses offered by other departments include Statistical Methods (Economics 140), Mathematics in the Elementary School and in the Junior High School (Education 129 and 112), and certain upper division courses in chemistry and physics.

LOWER DIVISION COURSES

C. Plane Trigonometry.

Right and oblique triangles; logarithms and slide rule; identities and equations. Prerequisites: Plane geometry and one and one-half year high school algebra.

Spring (2). (Not offered in 1932-1933.)

1A-1B. Elementary Functions.

LIVINGSTON

Algebra, numerical trigonometry, functions and graphs, introduction to calculus, with emphasis on applications. Prerequisites: Elementary algebra and geometry in high school.

Year course (4-4).

2. Mathematics of Investment.

WELLS

Interest and annuities; amortization; sinking funds; valuation of bonds; depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Plane trigonometry and two years of high school algebra, or equivalent.

Spring (3).

3A-3B. Analytic Geometry and Calculus.

WALSH

Analytic geometry and differential calculus, together with an introduction to the integral calculus. Prerequisites: Trigonometry, plane solid geometry, and two years of algebra in the high school.

Year course (3-3).

4A-4B. Intermediate Calculus.

LIVINGSTON

Integration, partial differentiation, infinite series and introduction to differential equations. Prerequisite: Mathematics 3A-3B, or a high school course in 7A-7B.

Year course (3-3).

7A-7B. Introduction to Analysis.

LIVINGSTON

Trigonometry, analytic geometry, differential calculus, introduction to integral calculus. Prerequisites: Plane geometry and two years of high school algebra.

Year course (4-4).

College Algebra.

Rapid review of elementary algebra, followed by logarithms, progressions and series, permutations and combinations, probability, theory of equations. Prerequisites: Plane geometry, one and one-half or two years high school algebra.

Fall and Spring (3).

A-10B. Appreciation and History of Mathematics.

GLEASON

Recreational reading in the history and philosophy of mathematics. Open to those who have taken some other course in college mathematics. Year course (1-1).

A-14B. Intermediate and Advanced Calculus.

GLEASON

Integration, partial differentiation, infinite series, differential equations and introduction to vector analysis. Prerequisites: Mathematics 3A-3B, a high grade in 7A-7B.

Year course (5-5).

UPPER DIVISION COURSES

1. Elementary Geometry for Advanced Students.

LIVINGSTON

Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry, and calculus.

Fall (3). (Not offered in 1932-1933.)

2. Elementary Algebra for Advanced Students.

LIVINGSTON

Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry and calculus.

Spring (3). (Not offered in 1932-1933.)

3. History of Mathematics.

GLEASON

A nontechnical course open to students who have some knowledge of fundamental ideas of mathematics.

Fall (3). (Not offered in 1932-1933.)

4. Modern Geometry.

GLEASON

The geometry of the circle and the triangle. Prerequisite: Mathematics 1B, 3A-3B, or 7A-7B.

Fall (3).

5. Projective Geometry.

GLEASON

The construction and study of conic sections by means of perspectives, poles and polars, and involutions. Prerequisite: Mathematics 105, or permission of the instructor.

Spring (3).

6. Theory of Equations.

LIVINGSTON

General solutions of algebraic equations; approximate numerical solutions; applications. Prerequisite: Mathematics 3A-3B or 7A-7B.

Fall (3).

7. Analytic Geometry of Space.

LIVINGSTON

Planes, lines, and quadric surfaces. Prerequisite: Mathematics 4A.

Spring (3).

119. Differential Equations.

GLEAS

Ordinary differential equations of first and second order, with applications. Prerequisite: Mathematics 4B or 14A.

Spring (3). (Not offered in 1932-1933.)

MUSIC

For course in preparation for Public School Music teaching, refer curriculum in Music Education, page 38.

Preparation for the presecondary major (lower division) required for the Junior certificate: Music 1A-1B, 2A-2B, 4A-4B, and two units electives in music. The electives in both lower and upper division must include at least six units in Applied Music (study of voice, or an instrument), of which at least three units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (Restrictions on applied courses, see page 45.)

Presecondary major (upper division): Music 103A-103B, 105A-105B, 106A-106B, 107A, 107B, 108, and 10 units of upper division electives in music. (See statement concerning Applied Music under lower division requirements.)

For information regarding majors and minors in music, and other details not found here, consult the Music Education Adviser.

LOWER DIVISION COURSES

1A. Music Reading and Ear Training—Fundamentals of Music.

BEIDLEMAN, L. D. SMITH, SPRINGS

Elementary music theory; scale construction; drill in music reading both with syllables and with words; ear training, elementary music dictation; the elements and materials of music. Basic course used as prerequisite for all advanced music work and for the courses in music education. Text—Gehrken: Fundamentals of Music. Students majoring in music may be exempted from this course by examination.

Fall and Spring (2).

1B. Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, sight singing with Latin syllables and with words. Text—Wedge: Ear Training and Sight Singing. Prerequisite: Music 1A, or the equivalent.

Spring (2).

1C-1D. Advanced Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, and sight singing in two, three, and four parts. Text—Wedge: Advanced Ear Training and Sight Singing. Prerequisite: Music 1A-1B.

Year course (2-2).

1E. Advanced Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, and sight singing in two, three, and four parts. Text—Wedge: Advanced Ear Training and Sight Singing. Prerequisite: Music 1C-1D.

Fall (2). (Offered in odd-numbered years.)

2A-2B. Appreciation and History of Music.

SPRINGS

How and of what music is made. How to listen to, enjoy, and appreciate it. The development of music from the earliest times, with a

icular effort to gain some acquaintance with the music of the various periods and composers by listening to examples of it. Illustrated with numerous phonograph records. A general fundamental, and nontechnical course, requiring no previous musical training or background.

Year course (2-2).

A-4B. Elementary Harmony.

SPRINGSTON

Scale construction, intervals, chords, structure, modulation, through various types of seventh chord. Especial attention is paid to the keyboard application of problems in harmonization, transposition, and modulation. Prerequisite: Music 1A, or the equivalent, and at least one year of piano study.

Year course (3-3).

B. Instrument Ensemble.

BEIDLEMAN

The practice and performance of music for small groups of string, wind, and brass instruments.

Year course beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

C. Vocal Ensemble and Chorus.

L. D. SMITH

A general course open to all students but one which may be offered to music students toward satisfying the requirement in vocal ensemble. Fixed harmony in two, three, and four parts; voice quality, phrasing, interpretation, and enunciation considered in detail; study of song material suitable for junior and senior high school.

Year course beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

UPPER DIVISION COURSES

3A-103B. Appreciation and History of Music—Great Music.

SPRINGSTON

Study of the great masterpieces of music in the larger forms, by means of phonograph records and scores. Prerequisite: Music 2A-2B, or 4A-4B, or equivalent.

Year course (1-1).

5A-105B. Advanced Harmony.

BEIDLEMAN

Completion of harmonic theory: modulation, inharmonic tones, etc. Continuation of harmonic analysis, and keyboard harmony. Melody writing. Prerequisite: Music 4A-4B.

Year course (2-2).

6A-106B. Applied Harmony.

BEIDLEMAN

Form and analysis. Polyphonic treatment of harmony. Introduction to musical composition. Prerequisite: Music 105A-105B.

Year course (2-2).

7A. Conducting.

BEIDLEMAN

The technique of the baton. Methods and materials for use in direct; choral organizations. Prerequisite: Music 1A-1B, or 4A-4B.

Fall (1).

7B. Conducting (Instrumental).

BEIDLEMAN

Theory and practice of instrumental conducting, with study of materials and methods. Taught in conjunction with, and requiring partici-

pation in, Instrumental Ensemble (Music 119). Prerequisite: Music 107A.

Fall and Spring (1).

108. Instrumentation.

BEIDLEMA

Theory and practice of arranging music for instrumental combination
Prerequisite: Music 4A-4B.

Spring (2).

110A-110B. Piano Class Principles.

SPRINGSTO

Materials and methods used in piano classes in the elementary school
Prerequisite: At least two years of piano study.

Year course (1-1), beginning either semester.

119. Instrumental Ensemble.

BEIDLEMA

(See Music 19.)

120. Vocal Ensemble and Chorus.

L. D. SMIT

(See Music 20.)

MUSICAL ORGANIZATIONS

11 or 111. Treble Clef (Women's) Glee Club.

L. D. SMIT

Membership based on competitive try-outs.

($\frac{1}{2}$ - $\frac{1}{2}$.)

12 or 112. Men's Glee Club.

BEIDLEMA

Membership based on competitive try-outs.

($\frac{1}{2}$ - $\frac{1}{2}$.)

13 or 113. Orchestra.

BEIDLEMA

(1-1.)

Applied Music

(Credit for applied music is available only for students majoring in music, and is subject to special permission and arrangement.)

15 or 115. Stringed Instruments.

16 or 116. Wind Instruments.

17 or 117. Voice.

18 or 118. Piano (Organ).

PHILOSOPHY

LOWER DIVISION COURSE

5A-5B. Introduction.

STEINMET

Semester I: Elementary orientation; the Republic of Plato; the persistent problems of philosophy. Semester II: The problems of philosophy systematized according to related sciences; the philosophy of science. Three lectures a week and occasional section meetings. Prerequisite: Sophomore standing or consent of instructor.

Year course (3-3).

UPPER DIVISION COURSE

1. Logic, and Philosophy of Mind.

STEINMETZ

Formal and functional logic; examination of reflective procedures in various fields; epistemological assumptions and traditional viewpoints, especially as illustrated in recent scientific writings; review of some psychological, experimentally supported explanations of thought. Prerequisites: Psychology 1A and Philosophy 5A.

Spring (3). (Not offered in 1932-1933.)

PHYSICAL EDUCATION

Men's Department

A two-hour activity course each semester is required for the two years lower division. A medical examination is given each student when entering and the work is fitted, as far as possible, to his needs. Physical efficiency tests are given at the beginning in order to classify the student to his physical ability. These are repeated at the beginning of the two succeeding semesters in order to note improvement and to arrange the pace of program so as to acquire all-round development. The content of the required two years is planned to give each student fundamental training in those sports which have carry-over value into after life. Opportunity is given all students to take part in the regular competitive sports program.

LOWER DIVISION COURSES

(Freshman year.) Self-defence and track and field fundamentals.
Fall ($\frac{1}{2}$).

Tennis, swimming, and golf.
Spring ($\frac{1}{2}$).

(Sophomore year.) Instruction and competition in handball, basketball, and speedball.
Fall ($\frac{1}{2}$).

Instruction and competition in volley ball, baseball, and track.
Spring ($\frac{1}{2}$).

or B. Golf. Spring ($\frac{1}{2}$).

or B. Track. Spring ($\frac{1}{2}$).

or B. Baseball. Spring ($\frac{1}{2}$).

or B. Basket ball. Spring ($\frac{1}{2}$).

or B. Tennis. Fall and Spring ($\frac{1}{2}$).

or B. Boxing. Fall and Spring ($\frac{1}{2}$).

or B. Wrestling. Fall and Spring ($\frac{1}{2}$).

or B. Cross country. Fall ($\frac{1}{2}$).

or B. Swimming. Spring ($\frac{1}{2}$).

or B. American football. Fall ($\frac{1}{2}$).

or B. Gymnastics. Spring ($\frac{1}{2}$).

The following courses fulfill degree requirements for physical education majors and meet state requirements for teaching credentials in physical education.

54. Administration of Physical Education.

The problems that arise in the everyday experience of the instructor in physical education, such as policies in administration, classification of students, administration of activities, organization of the leadership of students, arrangement and care of the physical equipment, personal relationships with students, interdepartmental adjustments, rolls, records and reports. Material presented in latest State Department Manual used as basis.

Fall and Spring (2).

UPPER DIVISION COURSES

101. Emergencies.

The accepted procedure in meeting the emergencies which daily arise in the schoolroom, play or athletic field, beach, mountains, or any of the many places where the physical director is called on for first aid. Special attention given to the arrangement of the apparatus and the activities so that many of the most common accidents are prevented or minimized.

(1)

151. Health Education.

(See Women's Department.)

Fall and Spring (2).

155. Applied Anatomy.

C. E. PETERSON

Mechanics of the human skeletal and muscular systems and their application in games, formalized activities, and general body movements; mechanical strength and durability as influenced by anatomical factors.

(2) (Offered in alternate years.)

156A. Sports Methods.

C. E. PETERSON AND S. L. PETERSON

Different theories and methods of teaching the more highly organized sports: baseball, basket ball, tennis, and track.

Fall (2).

156B. Sports Methods.

C. E. PETERSON AND S. L. PETERSON

Methods of teaching those sports most adaptable to intramural and interclass competition: golf, handball, soccer, speedball, and volleyball.

Spring (2).

162A. Gymnastic Activities.

C. E. PETERSON

Theoretical and practical work in marching, free exercises, and tumbling and heavy apparatus. Emphasis on progression and method of presentation of material. The simplest and most explanatory terminology.

Fall (2).

162B. Gymnastic Activities.

C. E. PETERSON

Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium and on the playground. Work of the recreational or self-interesting type rather than the formal.

climbing, stunts, and pyramid building given chief attention, although games of low organization are also considered.
Spring (2).

3. Aquatics. PHYSICAL EDUCATION STAFF
Details of handling an aquatic program, with stress on swimming, diving, and life-saving; both theory and practice.
Spring (1½).

4. Self-defense Activities.
Both theory and practice of boxing, wrestling, and weaponless defense.
Fall and Spring (1½).

5. Technique of Officiating. GROSS
Methods of officiating all the sports common to the school or college program, also methods of training student officials. Practice in the handling of elementary, junior high, high school, and interclass college competition.
Fall (1).

6. Community Recreation. HERREID
Planned to meet the needs of the various workers in community playground systems apart from schools, as well as the needs of directors of youth and recreation in social service institutions, industrial plants, shops, and factories. Special attention given to scout and campercraft.
Spring (2).

7. Principles of Physical Education. C. E. PETERSON
The material which seeks to establish the place of physical education and to indicate its indispensable character in modern life.
Fall (2). (Offered in alternate years.)

8. Physical Education Tests and Measurements.
Fall (2).

9. American Football. HERREID
Theory and practice of individual and team play. Each student taught fundamentals of football. Two hours of lecture and three hours of laboratory.
Fall (2).

PHYSICAL EDUCATION

WOMEN'S DEPARTMENT

All new students are given a medical examination to the end that the physical needs of each student may be determined and her class work arranged accordingly. Two hours weekly of directed physical activity are required in freshman and sophomore years. Emphasis is upon rhythmic activities, games, and sports.

LOWER DIVISION COURSES

1. Formalized Activities and Group Games. RAW
Fall and Spring (½).

52B. Stunts and Apparatus.

Fall and Spring ($\frac{1}{2}$).

52C. Athletic Games and Sports.

Fall and Spring ($\frac{1}{2}$).

52D. Rhythmical Activities.

Fall and Spring ($\frac{1}{2}$).

52. Game Activities.

Games suitable for large or small groups in elementary and junior high schools are studied and played, including rhythmic activities, games of low organization, and modified athletic games. Required for the elementary school credential instead of 52C.

Fall and Spring ($\frac{1}{2}$).

53. Administration of Physical Education.

Physical education problems, administration of tests, methods of classifying children for play activities, developing leaders, and carrying out intramural ideals. Particular attention is given posture problems. Content and administration of the state program in physical education form the basis of the course. Prerequisite: Physical Education 52.

Fall and Spring (2).

***55. Swimming.**

A. Beginning or intermediate ($\frac{1}{2}$).

B. Red Cross Life Saving Test ($\frac{1}{2}$).

Required of all freshmen women majoring in physical education.

***56. Tennis.**

Required of all sophomore women majoring in physical education. Tests given on playing skills and knowledge of teaching technique. ($\frac{1}{2}$).

***57. Golf.**

Required of all women majoring in physical education. ($\frac{1}{2}$).

UPPER DIVISION COURSES

102. Emergency and Safety Programs.

Means by which the number of accidents, especially among children may be reduced on street, playground, or at home; practical application of first aid methods. Of value to classroom teachers as well as to specialists in physical education.

(1).

151. Health Education.

A course for teacher-training students which includes the study of diseases, common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear.

* Women majoring in physical education are expected to select yearly sport as a major activity and two others as minors. This requirement refers to rules, teaching methods, and technique of playing, as well as to the skills of the individual.

school; and the elements which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation. Fall and Spring (2).

Applied Anatomy.

TANNER

A study of the movements of the human body with especial reference to the health problems of girls and women. (2).

A-157B. Sports Methods.

RAW

Practice for skill, study of rules, and of coaching methods. Prerequisite: Season's experience in at least four of the following sports—volley ball, basketball, hockey, speedball, soccer, baseball, tennis, and track activities. Year course (2-2).

Stunts and Tumbling.

RAW

A practical course in personal technique. Progressive series of individual, dual, and group stunts, including simple pyramids. (2).

Formalized Activities.

TANNER

The scientific adaptation of formalized exercises to individuals and to groups; an activity and methods class with opportunity for supervised practice teaching; elementary exercises on apparatus. (2).

Folk Dancing.

RAW

A series of folk and national dances for elementary and junior high schools. Emphasis is placed on methods of presentation as well as upon ability to execute the various dances. Note books are required. (2).

Dancing.

RAW

An introductory course to the fields of interpretative, character, and tap dancing. Particularly adapted to meet needs of prospective physical education teachers. (2).

Physiology of Exercise.

(2).

Recreational Leadership.

TANNER AND STAFF

Fundamentals of recreational leadership developed by instruction in handicraft, Camp Fire lore, Girl Reserve activities, the study of school recreational needs and facilities, and of civic recreation. (2).

Principles of Physical Education.

TANNER

The relation of physical education to other phases of education, with emphasis upon health and social adaptation. (2).

174. Campcraft.

TANNER AND ST

The technique of life in open camp developed by camp experience preceded by study of selection of equipment, proper outing clothes, tent making beds in the open, making camp fires, camp cooking, and camp recreations. Enrollment only by permission of the instructor.

(2).

175. Current Problems in Physical Education.

TAN

The latest phases of general physical education; problems particularly related to the work with younger children, girls, and college women; responsibility of the physical instructor toward emergencies and health service.

(2).

177. Individual Program Adaptations.

TAN

Adjustments of the physical education program to the physical needs and capacities of individuals; problems concerning protective and preventive measures which are not highly specialized corrective phases.

(2).

178A-178B. Camp Fire and Girl Scout Leadership.

The principles and procedures fundamental to leadership in these important organizations for girls taught by authorized local directors. Useful to college women interested in recreational aspects of social service. Open to all students.

A. Camp Fire Leadership (1).

B. Girl Scout Leadership (1). (Offered in 1933-1934.)

179. Physical Education Tests and Measurements.

(2).

PHYSICS

Preparation for the major in Physics (lower division) required for Junior certificate: Required: Physics 1A-1B and 1C-1D; Chemistry 1A-1B; Mathematics C, 3A-3B and 14A-14B, or their equivalents. Recommended: A reading knowledge of French and German.

LOWER DIVISION COURSES

1A-1B. General.

Mechanics, properties of matter, and heat. A development of fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. Lectures, assignments, problem sets, and experimental laboratory work. One lecture, and one laboratory period each week. Prerequisites: High school physics or chemistry and trigonometry, or concurrent registration in Mathematics C.

Year course (3-3).

1C-1D. General.

B.

A continuation of Physics 1A-1B for students in the sophomore year including magnetism, electricity, sound, and light. Two lectures and one laboratory period each week.

Year course (3-3).

2B. General.

BAIRD

Properties of matter, mechanics, heat, sound, light, electricity, and magnetism. A nonengineering course. Lectures, demonstrations, and discussions. Prerequisite: Two years of high school mathematics. Year course (3-3).

3B. Physical Measurements.

MOE

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity, and magnetism. Usually taken in conjunction with Physics 2B. Year course (1-1).

UPPER DIVISION COURSES

Optics.

BAIRD

Refraction, color, interference, diffraction, polarization, radiation, and optical instruments. Year course (3).

PHYSICS 107B. Electrical Measurements.

BAIRD

Dedicated mainly to the study of potentiometer methods, capacity, inductance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics. Year course (3-3). (Not offered in 1932-1933.)

Modern.

BAIRD

An introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity through gases, radiation and the quantum theory. Prerequisite: Eight units in physics. Year course (3).

Literature of Physics.

BAIRD, MOE

Reading or work on special problems in physics. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least eight units of work in the department with grade of A or B. Year and Spring (1 or 2—1 or 2).

POLITICAL SCIENCE

Preparation for the major in Political Science (lower division), required for the Junior certificate: Political Science 1A-1B and Economics 1A-1B or History 4A-4B or Geography 1 and 2. High school physics is presupposed in the following courses:

LOWER DIVISION COURSES

1. Comparative Government.

LEONARD

Comparative study of typical European governments and the government of the United States. Semester I: England, France, Germany, and Switzerland. Semester II: The lesser European states and the United States. Year course (3-3).

UPPER DIVISION COURSES

101. American Institutions.

LEON

Origins and principles of the United States Constitution, and a survey of the political institutions which have developed under it.

Prescribed by the State law for all candidates for the bachelor's degree. Enrollment is limited to juniors and seniors, except with the consent of the instructor. Those taking History 171A-171B, 173A-173B, Political Science 113 are excused from this requirement. Attention is called to the fact that this course is offered only during the first semester.

Fall (2).

111. Theory of the State.

LEON

The nature of the State, its organization and activities, and its relation to individuals and to other states.

Fall (3).

113. American Political Ideals.

LEON

Underlying theories and principles of American governmental policy. Meets the requirement on the United States Constitution for graduation. Spring (3).

PSYCHOLOGY

Preparation for the major in Psychology (lower division) requires the Junior certificate: Required: Psychology 1A-1B, Zoology 1A-1B, Biology 10A-10B. Recommended: French, German, Chemistry, Physics.

LOWER DIVISION COURSES

1A. General.

BELL, STEIN

An introductory survey of the entire field of psychology, including normal adult human behavior and the factors which condition it. Prerequisite to all courses in psychology. Not open to freshmen, but open to sophomores without prerequisite.

Fall and Spring (3).

1B. General.

An extension of the study of adult human behavior, stressing the history of psychology and introducing the student to experimental techniques. Prerequisite: Psychology 1A.

Spring (3).

2B. Applied.

A survey of modern psychology in its applications to the problems of the individual and to the fields of education, medicine, religion, law, music, and commerce. One purpose of the course is to give an intelligent basis for discrimination between scientific legitimate psychology and popular pseudo-psychology which makes an appeal because of its simplicity, plausibility, or mysticism. Prerequisite: Psychology 1A.

Spring (3).

UPPER DIVISION COURSES

2. Genetic (Growth and Development of the Child).

BELL, STEINMETZ

The mental and physical growth and development of the child, especially with relation to norms of structure and function. Diagnosis of individual children by comparison with norms. Behavior problems and growth of personality traits as conditioned by physical and mental factors. An intensive study of one child presenting a problem of physical mental maladjustment made by each student. Prerequisites: Psychology 1A and Education 108, taken either previously or at the same time. Fall and Spring (3).

3. Mental Testing.

BELL

A brief history of intelligence testing and the fundamental assumptions underlying the construction of tests. The Stanford revision of Binet-Simon test illustrated by demonstrations. Each student required to give at least 20 individual tests. Group intelligence tests discussed and demonstrated. The nature of intelligence and skill in giving it and interpreting results. Prerequisites: Psychology 1A and Education 108. Recommended: Psychology 102, Education 140. Fall (3).

4. Social.

BELL

Personality as it develops in relation to social environment. Suggestions: imitation, leadership, the crowd, public opinion, social control, prejudice, propaganda, etc. Prerequisite: Psychology 1A. Fall (3).

Educational Psychology

(See Education)

Secretarial Training

(See Economics)

Social Economics

(See Economics)

Spanish

(See Foreign Languages)

SPEECH ARTS

Preparation for the major in Speech Arts (lower division) required for the Junior certificate: Speech Arts 1A-1B, 55A-55B.

LOWER DIVISION COURSES

Elements of Public Speaking.

PFaff

Training in fundamental processes of oral expression; methods of selecting and organizing material; outlining; principles of attention and

delivery; extemporaneous speaking and open forum debating; practice construction and delivery of type forms of speech.

Fall and Spring (3).

1B. Argumentation and Debate.

PR

Obtaining and organizing of evidence and the construction and use of the brief; study and discussion of current issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating.

Fall and Spring (3).

55A-55B. Play Production.

JON

History and technique of dramatic production, with special emphasis on contemporary drama. Rehearsals and presentation of scenes and plays. Arranged for students interested in all the theater arts.

Year course (3-3).

55C-55D. Dramatic Interpretation.

JON

Use of speaking voice, correct diction, gesture, and pantomime. Principles of characterization and standards of acting. Practical work in knowledge of different types of plays through rehearsal and presentation.

Year course (3-3).

UPPER DIVISION COURSES

155A-155B. Dramatic Workshop.

JON

Advanced work along lines of student's individual dramatic interest in acting, directing, staging, costuming, play writing, and the like. Special attention given to creative work and practical experience. Prerequisite: Speech Arts 55A-55B.

Year course (3-3).

156A-156B. Advanced Play Production.

JON

Special training in educational, recreational and community dramatic activities for professional use. Practical production experience. Prerequisite: Speech Arts 55A-55B and instructor's consent.

Year course (3-3). (Not offered in 1932-1933.)

SURVEYING

LOWER DIVISION COURSES

1A-1B. Plane Surveying.

NIC

Use and adjustment of surveying instruments, computations and map making, together with a study of land, topographic, city, and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisite: Trigonometry and Mechanical Drawing.

Year course (3-3).

2. Summer Class in Surveying.

NIC

Practical field problems in reconnaissance, triangulation, location of topographic surveys. Observations for meridian, time and latitude. Precise work in linear and angular measurements. Development of section

iance, accuracy, and professional skill on the part of the student.
our weeks course, commencing after the close of the second semester.
erequisite: Surveying 1A-1B.
(3.)

Applied Astronomy.

NICOL

Lecture course in principles of practical astronomy for engineers.
atures, supervised problem solution and assigned problem sets, on the
damental formulae of spherical trigonometry and their application
the solution of observation on the sun and Polaris for time, latitude,
l azimuth of a course.
Spring (1).

ZOOLOGY

(See Biological Sciences)

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33/34

Bulletin

San Diego State Teachers College

—AND—

Announcement of Courses

1933-1934



June, 1933

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SACRAMENTO, 1933

SEP - 5 1933

UNIVERSITY OF ILLINOIS

Bulletin

San Diego State Teachers College

—AND—

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UNIVERSITY OF ILLINOIS

State Teachers College of San Diego

Volume Twenty-one

JUNE, 1933

No. 2

STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

STATE DEPARTMENT OF EDUCATION

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ex officio Director of Education
SAM H. COHN-----Deputy Director of Education

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Published Quarterly by the State Teachers College of San Diego
SAN DIEGO, CALIFORNIA

CALENDAR 1933-1934

SUMMER SESSIONS, 1933.

Term I, six weeks, June 26-August 4.

Term II, three weeks, August 7-August 26.

FALL SEMESTER, 1933-1934.

- September 11, 8.30-12.00 a.m., Preregistration of Old Students.
September 11, 8.00 a.m., College Aptitude Test.*
September 11, 2.30 p.m., Fundamentals Test.*
September 12, 8.00 a.m., Examination in Subject A (English Composition).
September 12, 10.00-12.00 a.m., Entrance Examination in Music (by Appointment).§
September 12, 8.30-12.00 a.m., Registration of Old Students.
September 12, 8.30-12.00 a.m. and 1.00-3.00 p.m., Payment of Fees by Students Who Preregistered.
September 12, 1.30 p.m., Official Assembly for New Students—Attendance Required.
September 13, 8.30-12.00 a.m., Registration of New Students with Clear Admission and Returning Students.
September 14, 8.30-12.00 a.m., Registration of New Students with Provisional Admission and Returning Students.
September 14, 1.30 p.m., Student Body Assembly.
September 18, Class Work Begins.
Thanksgiving Recess, Thanksgiving Day and the Friday following.
December 16, Christmas Recess Begins.
January 2, Class Work Resumes.
January 29-February 2, Mid-Year Examinations.

SPRING SEMESTER, 1934.

- February 5, 8.30-12.00 a.m. and 1.00-3.00 p.m., Preregistration of Old Students with Initials A-L.
February 6, 8.30-12.00 a.m. and 1.00-3.00 p.m., Preregistration of Old Students with Initials K-Z.
February 6, 9.00 a.m., College Aptitude Test.*
February 6, 1.00 p.m., Fundamentals Test.*
February 7, 8.00 a.m., Examination in Subject A (English Composition).
February 7, 10.00-12.00 a.m., Entrance Examination in Music (by Appointment).§
February 7, 8.30-12.00 a.m., Registration of Old Students.

* See page 22.

§ See page 41.

- February 7, 8.30-12.00 a.m. and 1.00-3.00 p.m., Payment of Fees
by Students Who Preregistered.
- February 7, 1.30 p.m., Official Assembly for New Students—
Attendance Required.
- February 8, 8.30-12.00 a.m., Registration of New Students with
Clear Admission and Returning Students.
- February 9, 8.30-12.00 a.m., Registration of New Students with
Provisional Admission and Returning Students.
- February 9, 1.30 p.m., Student Body Assembly.
- February 12, Class Work Begins.
- Mar.24-Apr.1, Easter Recess.
- May 1, Dedication Day.
- May 30, Memorial Day.
- June 8-14, Final Examinations.
- June 15, Annual Commencement Exercises.

SUMMER SESSIONS, 1934.

- Term I, six weeks, June 25-August 3.
- Term II, three weeks, August 6-August 25.

FACULTY

- EDWARD L. HARDY, LL.D., President SCHOOL ADMINISTRATION
B.L., University of Wisconsin; M.A., University of Chicago; LL.D.
La Verne College.
Study of European secondary schools.
Principal of San Diego High School. (Appointed September, 1910.)
- IRVING E. OUTCALT, M.A. VICE PRESIDENT AND PROFESSOR OF ENGLISH
A.B., M.A., Stanford University.
Student, University of Illinois; graduate study and research work
Stanford University. Travel in Europe.
Head of Department of English, San Diego High School.
(Appointed September, 1912.)
- J. W. AULT, M.A. DEAN AND PROFESSOR OF EDUCATION
B.S., Valparaiso University; M.A., University of South Dakota.
Student, Miami University; graduate student, University of Iowa and
University of Southern California.
Superintendent of city schools; conductor and instructor in teacher
institutes; Professor of Education at Southern State Teachers College,
Springfield, South Dakota. (Appointed September, 1925.)
- ARTHUR G. PETERSON, M.A. DEAN OF LIBERAL ARTS, EX OFFICIO I.
GENERAL CHARGE OF LOWER DIVI
SION STUDIES, AND PROFESSOR OF
ECONOMICS
A.B., College of the Pacific; M.A., Stanford University.
Graduate student, University of Southern California.
Vice Principal of San Diego High School and Director of Junior
College. (Appointed September, 1921.)
- CHARLES E. PETERSON, A.B. DEAN OF MEN AND ASSOCIATE PROFESSOR
OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR
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A.B., State Teachers College of San Diego.
Student, Oregon Agricultural College, University of California, and
two years under Robert Krohn; graduate student, Claremont College.
Director of Playgrounds, Portland, Oregon; Director of Physical
Education, Y. M. C. A.; Physical Education and Recreation work in
the United States Army Camp; Director of Physical Education in
Junior High School, Berkeley, California. (Appointed July, 1922.)
- MARY IRWIN McMULLEN, A.B. DIRECTOR OF PERSONNEL (WOMEN)
AND PLACEMENT SERVICE AND ASSISTANT PROFESSOR OF EDUCATION
A.B., State Teachers College of San Diego.
Public school teacher, Oakland, California.
(Appointed Secretary to the President July, 1926; Director
Personnel and Placement Service July, 1930.)
- JOHN R. ADAMS, M.A. ASSISTANT PROFESSOR OF ENGLISH
A.B., M.A., University of Michigan.
Graduate student, University of Southern California.
Instructor in Rhetoric, University of Michigan; Associate in English,
University of Washington. (Appointed September, 1928.)
- GEORGIA C. AMSDEN ASSOCIATE PROFESSOR OF COMMERCE
Gregg School, Chicago; special secretarial training in various institutions;
University of California summer session and extension division work.

Teacher in University of California summer school; Traveling Representative and Secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant Editor and Reporter, Daily Press, Ypsilanti, Michigan; Instructor, San Diego High School.

(Appointed September, 1925.)

UNIVERE KOTTER BACON, M.A. TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION

B.S., Utah Agricultural College; M.A., Stanford University.

Graduate student, Stanford University; University of California; Teachers College, Columbia University.

Teacher in Public Schools; Primary Supervisor.

(Appointed July, 1928.)

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PROFESSOR OF PHYSICS

A.B., University of Wisconsin; M.A., University of California.

Graduate student, University of Minnesota.

Head of Science Department, University of Wisconsin High School and Stadium High School, Tacoma, Washington; Assistant in Physics Department, University of Washington, Seattle.

(Appointed September, 1921.)

RED BEIDLEMAN, B.Mus.

ASSOCIATE PROFESSOR OF MUSIC

B.S., B.Mus., Columbia University.

Teacher of Music, Boys High School, Brooklyn, N. Y.; Instructor, Columbia University; Head of Violin Department, University of Illinois; Assistant Professor of Music, University of North Dakota; Professor of Music and Director of the Conservatory College of Puget Sound.

(Appointed September, 1927.)

RTRUDE SUMPTION BELL, M.A.

PROFESSOR OF PSYCHOLOGY

A.B., Indiana University; M.A., Stanford University.

Graduate, Indiana State Normal School; Research Work, Clark University. Travel in Europe.

Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University.

(Appointed August, 1916.)

NA CRON BOREN, A.B.

INSTRUCTOR IN ART

A.B., State Teachers College of San Diego.

Graduate, Kansas State Normal School, Emporia. Student University of Chicago; State Teachers College of Pittsburg, Kansas; Massachusetts Institute of Technology; Stout Institute.

Teacher in rural and city schools in Kansas and Pennsylvania; Supervisor of Manual Arts, city schools of Emporia, Kansas; Professor of Manual Arts and Director of Department, College of Industrial Arts, Denton, Texas.

(Appointed September, 1930.)

RJORIE KELLY BORSUM, A.B.

INSTRUCTOR IN ART

A.B., University of California at Los Angeles.

Pupil in Paris, of Andre Lhote, Painter, and of Mme. Alexandra Exter, Russian Stage Designer.

Instructor in Fine Art, Pasadena Junior High School.

(Appointed September, 1927.)

FLOR BROOKS, B.A.

INSTRUCTOR IN GEOGRAPHY

B.A., Stanford University.

Graduate student, University of Arizona; Harvard University; Oxford University; Stanford University. Travel in Europe.

Member of staff, Yosemite Field School of Natural History; Summer Lecturer, National Park Service, Yellowstone and Yosemite.

(Appointed September, 1931.)

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ASSOCIATE OF EDUCATION

A.B., M.A., University of Illinois; Ph.D., University of Southern California.

Student, University of Chicago.

Assistant in Psychology, University of Illinois; Teacher, High School, Elizabeth, Illinois; Superintendent of Schools, Scales Mound, Illinois, and Bramwell, West Virginia; Instructor in Education, Extension Division, Concord State Normal School, West Virginia; Teacher, Francis W. Parker School of San Diego; Lecturer and Visiting Assistant Professor of Education, University of Southern California; Visiting Assistant Professor of Education (summer session), The George Washington University; Associate Editor, The High School Teacher. (Appointed February, 1928)

LESLIE P. BROWN, M.A.

ASSOCIATE PROFESSOR OF SPANISH

A.B., Yale University; M.A., Harvard University.

Instructor in French and Spanish, Northwestern University; Harvard University; University of North Carolina; University of Chicago. (Appointed July, 1922)

ROY E. CAMERON, PH.D.

ASSOCIATE PROFESSOR OF ECONOMICS

A.B., Ph.D., University of California.

Student, Creighton University.

Professor of Economics, University of Omaha; Teaching Fellow, Economics, University of California. (Appointed September, 1925)

VINNIE B. CLARK, A.B.

ASSOCIATE PROFESSOR OF GEOGRAPHY

A.B., University of Wisconsin.

Graduate student, University of Chicago; University of Mexico. Travel in Mexico and Europe.

Assistant in Geography, University of Wisconsin; Teacher, Oak Park High School, Illinois; Instructor in summer session, University of California at Los Angeles. (Appointed September, 1914)

KATHERINE E. CORBETT, A.M.

TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION

B.Pd., Michigan State College; B.S., A.M., Teachers College, Columbia University.

Graduate Public School Music Course, Ypsilanti Conservatory of Music.

Teacher in Public Schools, Ypsilanti, Michigan; Training Supervisor, Kent State Normal College, Ohio; Evening High School, San Diego. (Appointed July, 1922)

J. GRANT CRAMER, M. A. ASSOCIATE PROFESSOR OF MODERN LANGUAGES

A.B., M.A., New York University.

Student, Columbia Law School; University of Leipzig, Germany. Twenty years residence, travel and study in Europe.

Instructor, French and German, Lehigh University, Bethlehem, Pennsylvania; Associate Professor, Modern Language Department, Boston University; Captain of Infantry, United States Army, Military Intelligence Division. (Appointed September, 1922)

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INSTRUCTOR IN BIOLOGY

B.S., M.S., Cornell University.

Assistant in Ornithology, Cornell University. (Appointed September, 1923)

ERBY CHESTER DEPUTY, PH.D.

ASSISTANT PROFESSOR OF EDUCATION

A.B., University of Denver; A.M., Ph.D., Columbia University.

Graduate student, University of Southern California.

Teacher in rural schools and principal of high schools, Indiana; Assistant Professor, University of Arkansas and Kansas State Teachers College. (Appointed September, 1923)

JOHN MORTIMER GLEASON, M.A.

ASSISTANT PROFESSOR OF MATHEMATICS

A.B., M.A., University of California.

Student, Hope College, University of Michigan, and University of Southern California.

Teaching Fellow in Mathematics, University of California.
(Appointed September, 1930.)

MORRIS HUBBARD GROSS, A.B. ASSISTANT PROFESSOR OF PHYSICAL EDUCATION

A.B., State Teachers College of San Diego.

Teacher, Chula Vista Grammar School; Basket Ball Coach, U. S. Marines and U. S. Naval Hospital.
(Appointed September, 1929.)

EDITH C. HAMMACK, B.A. TRAINING SUPERVISOR AND ASSOCIATE PROFESSOR OF EDUCATION

B.A., State Teachers College of San Jose.

Graduate of State Normal School of San Diego; graduate student, University of California.
Public School Teacher.
(Appointed February, 1911.)

DOROTHY R. HARVEY, M.A. ASSISTANT PROFESSOR OF BOTANY

A.B., State Teachers College of San Diego; M.A., University of Southern California.

Graduate student, Scripps Institute for Biological Research, La Jolla; University of California. Public School Teacher.
(Appointed September, 1924.)

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B.A., Pomona College; Ph.D., Cornell University.

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(Appointed September, 1928.)

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A.B., Washington State College.

Graduate student, University of California and University of Southern California.

Freshman Football Coach, Washington State College; Director of Physical Education, Aberdeen High School, Aberdeen, Washington; Director of Physical Education, Santa Maria Union High School; Coach, Huntington Park Union High School.
(Appointed September, 1930.)

EVERETT GEE JACKSON, A.B. ASSISTANT PROFESSOR OF ART

A.B., State Teachers College of San Diego.

Student, Agricultural and Mechanical College of Texas; Art Institute of Chicago.

Associate Professor, Sul Ross Teachers College, Alpine, Texas; Instructor, Academy of Fine Arts, San Diego; painter.
(Appointed November, 1930.)

MARGUERITE VEASEY JOHNSON, A.M. REGISTRAR AND ASSOCIATE PROFESSOR OF LATIN

A.B., Radcliffe College; A.M., Columbia University.

Teacher of Latin, History and French; Assistant in the Registrar's Office, Teachers College, Columbia University. (Appointed July, 1927.)

TYRTLE ELIZABETH JOHNSON, Ph.D. PROFESSOR OF BIOLOGY

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Research Assistant, Scripps Institute for Biological Research, La Jolla; Instructor, Pasadena High School. (Appointed September, 1921.)

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Director, Junior Players of Pasadena Community Playhouse; Drama Instructor in Chouinard Art School, Los Angeles; Organizing Secretary

and Instructor in Play Writing of Summer Art Colony at Pasadena Community Playhouse; Drama Organizer and Director of San Diego Community Service. (Appointed September, 1925.)

JOSEPH SUMNER KEENEY, Ph.D. INSTRUCTOR IN ENGLISH
A.B., M.A., Yale University; Ph.D., University of California.
Instructor in English, Yale in China, Changsha, China; Instructor San Diego Army and Navy Academy; Instructor in English, University of California. (Appointed February, 1933.)

GENEVIEVE KELLY, A.M. INSTRUCTOR IN SOCIOLOGY
A.B., University of California; A.M., Columbia University.
Student, Los Angeles Public Library School. Graduate student, University of Chicago. Travel in Europe.
Teacher, Corcoran Union High School. Librarian, Northern Arizona Normal School, Flagstaff; Scripps Foundation for Research in Population Problems, Oxford, Ohio. (Appointed September, 1924.)

CHARLES B. LEONARD, Ph.D. PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California.
Instructor in History, Lowell High School, San Francisco; Teaching Fellow in History, University of California. (Appointed September, 1921.)

LEWIS B. LESLEY, M.A. ASSOCIATE PROFESSOR OF HISTORY
A.B., Stanford University; M.A., University of California.
Native Sons' Traveling Fellow in Europe from University of California.
Instructor, Principia School, St. Louis, Missouri; Teaching Fellow in History, University of California; Acting Assistant Professor of American History, Pomona College. Summer session staff, Claremont Colleges. (Appointed September, 1924.)

GEORGE R. LIVINGSTON, M.A. ASSOCIATE PROFESSOR OF MATHEMATICS
B.S., M.A., University of California.
Instructor, San Diego Junior College; Head of Department of Mathematics, Santa Barbara Junior College. (Appointed September, 1921.)

ELMER ALLEN MESSNER, M.A. INSTRUCTOR IN CHEMISTRY
A.B., M.A., Stanford University.
Student, Marquette University, Milwaukee, Wisconsin; State Teachers College of San Diego. Registered Assistant Pharmacist, State of Wisconsin; Licentiate in Pharmacy, State of California. Graduate Student, University of Breslau, Germany. (Appointed September, 1931.)

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A.B., M.A., Stanford University.
Student, State Teachers College of San Diego. (Appointed September, 1931.)

ABRAHAM P. NASATIR, Ph.D. ASSOCIATE PROFESSOR OF HISTORY
A.B., M.A., Ph.D., University of California.
Native Sons' Traveling Fellow in History in Europe.
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WILLIAM L. NIDA, M.A. PROFESSOR OF EDUCATION, SUPERVISOR OF PUBLIC SCHOOL PRACTICE TEACHING
Ph.B., Ohio State University; M.A., University of Southern California.
Graduate student, University of Chicago.
Principal of Ohio High Schools; Superintendent of Schools in Illinois; Supervisor, Junior High School, San Diego. (Appointed July, 1921.)

LENA PATTERSON, M.A.

ASSOCIATE PROFESSOR OF ART

A.B., B.S., Ohio University; M.A., Columbia University.
Student, Cincinnati Art Academy; Chicago Art Institute; Otis Art
Institute; Rudolph Schaeffer School; Reimann School and Itten School,
Berlin, Germany; Zweybruck School, Vienna, Austria.
Assistant, Ohio University; Professor, State Teachers College, Kirks-
ville, Missouri; Assistant Scholar, Art Department, Columbia Uni-
versity; Instructor, Chouinard School of Art, Los Angeles. (Appointed
July, 1933.)

PAUL LEWIS PFAFF, B.A.

INSTRUCTOR IN ENGLISH

B.A., Stanford University.
Student, State Teachers College of San Diego; graduate student,
Claremont Colleges. (Appointed September, 1931.)

WALTER T. PHILLIPS, M.A.

ASSOCIATE PROFESSOR OF SPANISH
AND FRENCH

A.B., University of Washington; M.A., Stanford University.
Student, National University of Mexico; Institute of French Educa-
tion, Pennsylvania State College.
Teaching Assistant in Spanish, Stanford University; Assistant
Professor of Modern Languages, Willamette University; Instructor
in Spanish, Brown University. (Appointed September, 1927.)

LICE M. RAW, A.B.

ASSISTANT PROFESSOR OF PHYSICAL EDUCATION

A.B., University of Southern California.
Graduate student, University of Southern California. Travel in
Europe. (Appointed September, 1923.)

LABEL M. RICHARDS, A.M.

TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION

B.S., A.M., University of Missouri.
Graduate student, University of Southern California.
Rural, City and High School Teacher; City Superintendent of
Schools; Supervisor of Mathematics, Training School, State Teachers
College, Warrensburg, Missouri; Director in Demonstration School,
Northeast Missouri State Teachers College. (Appointed September, 1921.)

UDLEY H. ROBINSON, M.S.

ASSISTANT PROFESSOR OF CHEMISTRY

B.Sc. in Sugar Engineering, University of Louisiana; M.S., State
University of Iowa.
Chemist, University of Louisiana Sugar House; Raceland Sugar
Factory; State Sugar House, Louisiana; Research Chemist, Thornley
and Company; Chief Chemist, Pacific Marine Chemicals, Inc.
(Appointed September, 1928.)

ENCER L. ROGERS, A.M.

INSTRUCTOR IN ANTHROPOLOGY
AND ENGLISH

A.B., State Teachers College of San Diego; A.M., Claremont
Colleges.
Student in Archaeology, School of American Research, Santa Fe,
New Mexico.
Curator in Anthropology, San Diego Museum; honorary curator
in prehistory, San Diego Museum. (Appointed September, 1930.)

T. SKILLING, M.S.

PROFESSOR OF ASTRONOMY

B.S., M.S., University of California.
Student, State Normal School, Los Angeles; Stanford University.
Teacher, Los Angeles County and City public schools; Assistant in
Physics, University of California. (Appointed September, 1901.)

ORENCE L. SMITH, M.A.

ASSOCIATE PROFESSOR OF ENGLISH

A.B., Northwestern University; M.A., University of Chicago.
Graduate student, Medill School of Journalism, Chicago.
Instructor, State Normal School, Oshkosh, Wisconsin.
(Appointed July, 1917.)

- L. DEBORAH SMITH, A.M. ASSOCIATE PROFESSOR OF MUSIC
Mus.B., A.B., Oberlin College; A.M., Columbia University.
Graduate student, Stanford University.
Head of Department of Music, State Teachers College, Winona
Minnesota. (Appointed September, 1922.)
- MARIAN PEEK SMOOR, A.M., TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION
A.B., A.M., Stanford University. Travel in Europe.
Teacher in Public Schools; Assistant in History, Stanford University;
Dean of Women, State Normal School, Cheney, Washington
Instructor, Francis W. Parker School, San Diego, California.
(Appointed September, 1923.)
- CHRISTINE SPRINGSTON, B.M. ASSISTANT PROFESSOR OF MUSIC
B.A., B.M., University of Redlands.
Graduate student, University of Redlands and University of
Southern California; student in piano with A. E. Guerue of St. Louis
and Olga Steeb of Los Angeles. "Diploma of Execution," Conservatoire
Americain, Fontainebleau, France.
Supervisor of Music, Needles, California; Assistant in Piano, Organ
and Theory, University of Redlands; Instructor, San Diego High
School. (Appointed September, 1930.)
- HARRY C. STEINMETZ, A.M., ASSISTANT PROFESSOR OF PSYCHOLOGY
A.B., University of California; A.M., University of Southern California.
Assistant in Journalism, University of the Philippines, Manila.
Assistant in Educational Psychology, University of California.
Instructor, Glendale Union High School and San Mateo Junior College.
(Appointed September, 1930.)
- JOHN PAUL STONE, M.S., in Library Science LIBRARIAN
B.S., Northwest Missouri State Teachers College; M.S., University
of Illinois Library School.
Instructor in English and Public Speaking, Senior High School,
Joplin, Missouri; Library work, University of Illinois Library; Professor
of Library Science, Louisiana State Teachers College.
(Appointed September, 1930.)
- ALVENA SUHL, M.A. ASSOCIATE PROFESSOR OF GEOGRAPHY
A.B., M.A., University of California.
Teaching Fellow, University of California; teacher in public schools.
(Appointed September, 1926.)
- JESSIE RAND TANNER, B.S. ASSOCIATE PROFESSOR OF PHYSICAL
EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN
B.S. and Bachelor's Teaching Diploma, Teachers College, Columbia
University.
Graduate, Boston Normal School of Gymnastics; Graduate student,
University of California and University of Southern California.
Tutor, Brookline, Massachusetts; Supervisor of Physical Education,
San Diego County Rural Schools, 1921-1923. (Appointed July, 1924.)
- FRANKLIN D. WALKER, Ph.D. ASSOCIATE PROFESSOR OF ENGLISH
B.A., (Hons. Oxon), University of Oxford; Ph.D., University of
California.
Student, University of Arizona; Holder of Arizona Rhodes Scholarship
to Oxford; Graduate student, University of California.
Instructor in Dramatics, Francis W. Parker School, San Diego,
California. (Appointed September, 1924.)
- CURTIS REYNOLDS WALLING, E.E. INSTRUCTOR IN MATHEMATICS
AND INDUSTRIAL ARTS
A.B., E.E., Stanford University.
Student, State Teachers College of Fresno; graduate student,
Stanford University. Graduate student training course, Western

house Electric and Manufacturing Company, East Pittsburgh, Penn-
sylvania.
(Appointed September, 1931.)

W. H. WRIGHT, M.A. ASSOCIATE PROFESSOR OF COMMERCE
B.S., M.A., University of California.
Head of Department of Commerce, Visalia Union High School,
Visalia, California.
(Appointed September, 1921.)

ASSOCIATE (PART-TIME) MEMBERS OF THE FACULTY

ELIZABETH MCPIKE BROWN, PH.D. ASSISTANT PROFESSOR OF FRENCH
Ph.B., M.A., Ph.D., University of Chicago.
Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France;
Certificate d' Etudes Francaises, University of Paris.
Assistant in French, University of Chicago; Head of French Depart-
ment, Rockford College, Rockford, Illinois; Instructor in University
of California, Extension Division, San Diego, California.

JEAN BLAKE INSTRUCTOR IN METEOROLOGY AND CLIMATOLOGY
Meteorologist, United States Weather Bureau, San Diego.

MARIAN EVANS, B.S. INSTRUCTOR IN EDUCATION
B.S., New York University.
Graduate, State Normal School, Los Angeles; Student, University
of California, University of New Mexico, State Teachers College of
San Diego.
Teacher, San Bernardino, Sierra Madre, San Marino; Director of
Visual Education Activities, San Diego City Schools.

EGINALD POLAND, A.M. PROFESSOR OF ART
A.B., Brown University; A.M., Princeton University; A.M., Harvard
University.
Fellowship from Princeton University to American Academy at
Rome.
Director of Denver Art Association; Educational Secretary, Detroit
Institute of Art; Director of San Diego Fine Arts Gallery.

ILL J. STANTON, LL.B. ASSISTANT PROFESSOR OF LAW
LL.B., University of Michigan.
Graduate student, University of Michigan.
Editor legal journal; practicing attorney, Michigan and California.
Instructor, San Diego High School and Junior College.

ASSISTANTS

TTTON A. NICOL, B.S. SURVEYING AND INDUSTRIAL ARTS
DREY BOWEN PETERSON, A.B. TRAINING SCHOOL
LDE MARIE KRAMER WALKER GERMAN

SUPERVISORS IN THE EUCLID SCHOOL

LEN K. SYLVESTER PRINCIPAL
RIEL CLAYTON
S. AGNES E. CRAFTFORD
TH MERRILL
RUTH M. COOPER
MRS. MARIE M. JOHNSON
VESTA M. PETERSEN

MEDICAL EXAMINER

O. S. HARBAUGH, M.D.

MEDICAL EXAMINER

LIBRARY STAFF

JOHN PAUL STONE, M.S. IN LIBRARY SCIENCE	LIBRARIAN
GENEVIEVE KELLY, A.M.	ASSISTANT LIBRARIAN IN CHARGE CATALOGING
LULU GERMANN, B.S.	ASSISTANT LIBRARIAN IN CHARGE CIRCULATION
HARRIET B. STOVALL	ASSISTANT LIBRARIAN IN CHARGE MENDING AND LETTERING
ALICE E. PRATT, Ph.D.	ASSISTANT LIBRARIAN IN CHARGE REFERENCE WORK
CHARLOTTE G. ROBINSON	LIBRARIAN OF TRAINING SCHOOL

STAFF OF REGISTRAR'S OFFICE

MARGUERITE V. JOHNSON, A.M.	REGISTRAR
DOROTHY MAY HARRISON	ASSISTANT TO THE REGISTRAR
MADOLYN M. BARNES, B.A.	SECRETARY TO THE REGISTRAR

STAFF OF BUSINESS OFFICE

F. W. VAN HORNE	FINANCIAL SECRETARY
L. J. CROUCH	ASSISTANT FINANCIAL SECRETARY
MAYME J. SULLIVAN	TELEPHONE OPERATOR

STAFF OF PERSONNEL AND PLACEMENT OFFICE

MRS. MARY IRWIN McMULLEN, A.B.	DIRECTOR
ANNE T. SULLIVAN	SECRETARY

TRAINING SCHOOL STAFF

ERBY CHESTER DEPUTY, Ph.D.	PRINCIPAL
FLORENCE WIGGINS	SECRETARY

MAINTENANCE STAFF

C. L. FISKE	BUILDING
MARTIN ROTH	GROUP
A. L. SEELIG	HEAT AND MECHANICAL EQUIPMENT
W. T. BOWEN	CUSTODIAN

THE COLLEGE

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the Legislature, later approved by the Governor of the State and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) were offered, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service in the new three and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the A.B. degree (major in Education) were established for this institution June 30, 1923.

Since July 1, 1927, the courses formerly carried as "junior college" courses have been offered as lower division courses of the regular four-year curricula. On July 12, 1928, the college was authorized by the State Board of Education to offer presecondary curricula with majors in Chemistry, History, English and Romanic languages, and special secondary certification curricula with majors in Physical Education, and Art, all of them leading to the A.B. degree. On January 6, 1930, the State Board of Education authorized the following additional majors in the presecondary curricula: Art, Biological Science (Zoology now offered), and Social Sciences (Economics, Geography and History now offered); also the special secondary certification curriculum with a major in Music. On April 12, 1930, the presecondary major in Commerce was authorized by the State Board of Education, and also the special secondary certification curriculum with a major in Commerce. On June 27, 1931, and on March 18, 1932, presecondary majors in Music and Mathematics were authorized respectively in the same manner.

For the certification of teachers, the authorized courses (elementary, junior high school and special secondary) are offered and, requiring four years of work, lead to the A.B. degree with any one or a combination of the following credentials: Elementary School, Junior High School, Special Secondary in Art, Special Secondary in Commerce, Special Secondary in Music, Special Secondary in Physical Education.

ENVIRONMENT AND STANDARD

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than physical must be taken into account by the student choosing a college. In cultural standards in art, music, literature, and science, San Diego is a favorable college city because, while it is not large, yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-16, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections. The Fine Arts Gallery contains excellent exhibitions of paintings. There are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings, and pageants.

At La Jolla, within the city limits, the Scripps Institution of Oceanography, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point particularly as the college will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The teacher-training program profits because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary school, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the college.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 5 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaska summers and Egyptian winters.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills, and mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round.

BUILDINGS AND EQUIPMENT

On February 1, 1931, the college was moved to the new buildings and campus, located one mile north of the city's principal east-west boulevard, El Cajon Avenue. The campus has an area of one hundred twenty-five acres. The new buildings are part of a general plan to be completed within the next few years. This plan calls for one style of architecture for the entire group of the Spanish-Moorish type, which is well suited to the landscape and climate of the region. The buildings now in use include the Academic Building, which houses lecture halls, classrooms, and administrative offices; Science Building; Library; Little Theater; Training School; Scripps Cottage (a social clubhouse for women students); the Student Building, housing the soda fountain, cafe, and bookstore. A structure of the duplex gymnasium type, with adequate facilities for the physical education and development of both men and women is in process of construction and will be ready for use in September, 1933. Improvement of the campus which will furnish playing fields and courts for collegiate sports and athletics will also be completed. The Training school is supplied with its own, separate play spaces.

AFFILIATED PRACTICE SCHOOL

The Euclid School, a San Diego City elementary school, is affiliated with the college for practice teaching purposes. Cadets are assigned to teach in this school after having had successful initial experience in the Training School or elsewhere. The assignment is for a full half-day for a semester and carries a maximum of seven and one-half units of credit.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students are required to meet the health standards set by the department of physical education, and all lower division students, unless excused for cause, are required to take the courses in physical education, prescribed for freshmen and sophomores. Furthermore, each student is expected as a matter of efficient student and community life to keep himself in the best possible physical condition. Standards of scholarship are based upon high entrance standards. Freshman ratings of the student are made by his instructors, so that he may all times know how he stands; but the ability of the student to manage his own educational career and to come reasonably near to his best capacities are factors that will count in his final ratings. Entrance standards of character, as developed by and measured by honest self-work, and as revealed by evidences of the possession of thoroughgoing self-respect and community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, every student will have full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration, class attendance, conduct of examinations, and the like, college affairs are controlled by standards which are the result of experience which reflect a very definite public opinion and college morale. There is no honor "system," but there is a standard of honor as to honest college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom, or of student body by-laws) and usually, are settled by student action.

ORGANIZATION

THE CALENDAR AND REGISTRATION

The college year is divided into the fall and spring semesters of eight weeks each, followed by a summer session consisting of terms of six, nine, and three weeks. Students may enter at the beginning of either semester and at the beginning of either the six or the three weeks' summer term.

The Summer Session meets the needs of regular students who wish to gain credits toward the A.B. degree, of teachers in service who wish to obtain further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work in the lower division.

Registration of students will be made September 12, 13, and 14 for the fall semester, and February 7, 8, and 9 for the spring semester. Those entering as freshmen must see that the high school principal's recommendation is on file before registration day. This recommendation must be made on a form furnished by the college. Those entering with advanced standing must submit transcripts of record covering high school and college work by August 20, January 20, and June 10 for admission to the fall and Spring semesters and the Summer Session, respectively. An application for evaluation must also be filed, stating which curriculum is desired. In the case of transcripts arriving after the dates specified, persons entering run the risk of being obliged to register as special students, without adequate advice concerning their programs with reference to requirements.

ADMISSION TO COLLEGE

GENERAL REQUIREMENTS

Every person admitted as a student to this college must be of good moral character, of good health, and of that class of persons, who, of proper age, would be admitted to the public schools of the state without restriction. At entrance, every student must take an examination to determine his physical fitness for the teaching profession.

A candidate for admission under any of the three following types of standing, must submit the names of three persons by whom he or she has been employed (including the latest employer), if the candidate has not been in attendance at school or college during the semester preceding entrance. These names should be placed on file with the Registrar at least three weeks before the date for registration.

I. Freshman Standing

Graduates of accredited public high schools of California, graduates of other schools of California, and graduates of schools of secondary grade of other states recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study and who are recommended by the principal of the school in which such course of study was completed, may be admitted to undergraduate standing.

Candidates may be admitted by either of two methods:

1. Regular (clear) admission. High school graduates who present twelve recommended units and principals' certificates of recommendation, will be granted regular admission. Graduates of three-year senior high schools must present nine recommended units earned in grades ten, eleven and twelve.

2. Provisional admission. High school graduates who present fewer than the prescribed number of recommended units, but who through their principals' estimations and recommendations, present satisfactory evidence of ability to profit by courses in teacher training, who have abilities, interests and talents desirable in teaching, and who pass suitable college aptitude tests, may be admitted as provisional students. At the close of the first semester in residence, a complete reevaluation of the credentials and records of all such students will be made. Students will then be granted clear admission, dropped from the college, or for sufficient reason continued as provisional students.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can not meet the requirements of either of the above methods. The entrance examinations of the Board are held in June each year (in California, at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon a blank form to be obtained from the secretary of the Board upon request.

II. Advanced Standing

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Credit is given only for regular college work in institutions uniformly recognized as standard colleges, or colleges maintained primarily for the training of teachers, or professional schools in those fields in which this college grants a special credential.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

III. Special Standing

Either of the two following types of candidate may be admitted as a special student, provided he is at least 21 years of age. (Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students.)

1. High school graduates who did not make a sufficient number of recommended grades to obtain a principal's recommendation may be admitted as special students in such courses as they seem qualified to undertake. In such cases candidacy for graduation depends upon meeting the scholarship requirement of a "C" average.

2. A candidate who has not had the opportunity to complete a satisfactory high school course, but who is considered competent to undertake certain courses, may be admitted to special standing. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Such a student may become a candidate for graduation upon removing the high school deficiency.

MATRICULATION RECOMMENDATIONS FOR CERTAIN CURRICULA

In planning to comply with the foregoing requirements for freshman standing, the prospective student is advised to arrange his high school program so as to enable him to enter without handicaps the work of the curriculum to which he seeks admission. Although deficiencies in certain subjects may be removed after admission to freshman standing, such removal will not only reduce the student's opportunity for elective study but may make it necessary for him to extend his college course beyond the normal period of time required for its completion.

In general preparation for a teacher-training curriculum, the prospective student should have attained proficiency in reading, spelling, handwriting, arithmetic, and the use of English.

In preparation for major work in the biological sciences and in the premedical and predental curricula, the prospective student is advised to include chemistry or physics and French or German. For a college major in mathematics or physics, the student should include French or German, geometry, algebraic theory and trigonometry in his high school program, and for a major in chemistry he should include algebraic theory and physics or chemistry. Algebraic theory and trigonometry are recommended for a major in commerce. In his preparation for engineering curricula, the prospective student is strongly urged to lay a good foundation in the study of elementary algebra, plane geometry, algebraic theory, trigonometry, physics, chemistry, and mechanical drawing. For a major in English or a foreign language, the study of Latin is recommended.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements. The standing of all students is conditional during the first semester of residence.

REGISTRATION PROCEDURE

REGISTRATION

Registration takes place on regularly appointed days at the beginning of each semester. Faculty advisers representing every curriculum assist students in the planning of their programs, but students are urged to study the requirements of the curriculum they intend to follow and to decide upon their choice of electives before consulting their advisers. New students should not expect assistance with their programs until registration day. After their first registration, however, students are given the privilege of planning their programs during the preregistration period immediately preceding the regular registration days, when they may hold more lengthy consultations with their advisers than on registration day. Since registration is not complete until fees have been paid, students should be careful to provide themselves with sufficient funds on registration day.

TESTS REQUIRED AT REGISTRATION TIME AND LATER

(See Calendar for dates.)

1. An examination for the determination of physical fitness is required of all students at entrance. Appointments are made during registration.
2. All students entering the college are required to take the following tests, mainly for purposes of guidance and assistance: (a) College Aptitude Test. (b) English Composition Test.* Exceptions may be made for students who register for six units of work or less, for former graduates of this college, and for graduates of approved four-year colleges.
3. The Fundamentals Test in reading, spelling, arithmetic and handwriting is a prerequisite for certain courses in Education (see descriptions of courses in Education). Exceptions may be made for former graduates of this college and for graduates of approved four-year colleges.

LATE REGISTRATION

A new student who registers after the close of the first week of the semester is subject to a limitation of his program. A fee of \$2 must be paid for registration after the regular registration period. After the first week of the semester, the instructor's approval must be secured for each course entered.

CHANGES IN REGISTRATION

Changes in program may be made only with the approval of the student's adviser. In addition, the instructor's approval must be secured for entering a course after the first week.

*This is required mainly for classification purposes. The results must be considered by students and advisers in the making of schedules. Students are themselves primarily responsible in the matter of overcoming deficiencies. No student whose use of the English language continues to be notably inaccurate or inadequate should expect to receive a certificate of graduation from the college.

AUDITORS

Regular auditors must register in the usual way, though this may be one on the first day on which they have classes, without payment of the late fee.

SEMESTER FEES (SUBJECT TO REVISION)

Fees Collected on Registration Day

	Fee	Deposit
Registration fee (resident students—7 units or more)	\$6.50	
Registration fee (resident students—6 units or less)		
\$2.50 per unit with \$12.50 maximum		
Registration fee (nonresident students—		
(First semester residence) -----	75.00	
(Subsequent semesters) -----	37.50	
Late registration fee (penalty) -----	2.00	
Contingent fee -----	† 8.00	*\$4.00
Locker -----	1.00	* .50
(combination padlock) -----	.25	* .75
(key) -----	.25	* .25
Parking fee -----	.50	

OTHER FEES AND DEPOSITS (Subject to Revision)

	Fee	Deposit
Fee for additional transcript -----	\$1.00	
Special examination fee -----	2.00	
Evaluation of record fee -----	2.00	
College Aptitude Test -----	2.00	
English: Subject A -----	.25	
Fundamentals Test -----	.50	
Geology -----	1.50	
Any -----	1.50	
Chemistry: 1A, 1B, 6A, 6B, 7, 8 -----	7.50	\$5.00
101, 102 -----	2.50	5.00
106A, 106B, 107, 108 -----	7.50	5.00
123, 124 (per unit) -----	2.50	5.00
200 (per unit) -----	1.00	2.50
Graphy and Geology -----	1.00	
Physics: 2A, 2B -----	1.00	
.50 -----	.50	
Physics: 1A, 1B, 1C, 1D, 3A, 3B, 107A, 107B -----	2.50	* 2.00
Practice Teaching (Education 116) (per unit) -----	.75	
Psych Arts: 55A, 55B, 55C, 55D -----	1.00	
155A, 155B, 156A, 156B -----	1.00	
Psychology: 1A, 1B -----		* 2.00
Training School contingent fee -----	2.50	
Psychology: 1A, 1B -----	3.50	
100 -----	2.50	
121 -----	1.50	
Contingent book and collateral fee (subject to arrangement in each course) from -----	.25 to 1.00	

Students having deposits from the first semester do not pay the fee for the second semester.

Students taking six units, or less, pay a contingent fee of only \$2.50.

LIVING EXPENSES

Since no dormitories are maintained for the college campus, it is impossible to supervise the living quarters of college students. Students are required to keep the office of the Dean informed of their places of residence if not living with parent or guardian, and every effort is made to assist them in choosing suitable living accommodations.

The Director of Personnel will furnish upon request addresses of homes in which board and room may be secured; also lists of apartment houses and single rooms which may be patronized by students.

Board and room, two meals per day, may be procured at from \$10 to \$35 per month. Apartments, consisting of one room, kitchenette and bath, renting at \$20 to \$35 per month, will accommodate one or two persons. Single rooms with kitchen privileges at from \$10 to \$15 per month are also available. While at present there are very few accommodations in the immediate vicinity of the college, all of those listed are within reasonable distance and easily accessible to the college.

SELF HELP AND LOAN FUND

A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. An employment service is conducted by an administrative committee, members of which are the Director of Personnel, the Dean of Men and the Dean of Liberal Arts.

The San Diego State College Loan Foundation has been established for the purpose of helping worthy students with insufficient financial resources to continue their education. Both long and short term loans are available to students who have been in attendance at the college for at least one year. Loan funds are also administered by the Associated Women Students, the Kiwanis Club of San Diego, the City Teachers' Association, the Scottish Rite Woman's Club, and the Entomological Club.

The College Y. W. C. A. has established a scholarship fund which awards one hundred dollars, payable in ten monthly payments, to a young woman during each college year. A scholarship for men is maintained by the Associated Men Students.

ADMINISTRATIVE REGULATIONS

OFFICERS FOR CONSULTATION

Concerning the housing and living arrangements of students, dates and arrangements for all student social affairs, personal advice (women)—The Director of Personnel.

Concerning matters of student-body policy, personal advice (men), etc.—The Dean of Men.

Concerning supervision of practice teaching, conference, credential requirements, etc.—The Dean of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar and the Board of Student Advisers.

Concerning health and physical condition, college athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The Principal of the Training School.

Concerning student-body affairs.—The executive officers of the student-body; the Dean of Liberal Arts; the Director of Personnel; Dean of Men.

Concerning appointments to teaching positions—The Director of Placement Service.

Concerning use of the buildings—The Superintendent of Buildings.

CLASSIFICATION

Regular students are those students who have complied with the requirements of admission and are registered in 7 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 7 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration, students who have completed 0 to 9 units of work are classified as freshmen; those who have completed 10 to 59 units, as sophomores; those who have completed 60 to 89 units, as juniors; and those who have completed 90 or more units as seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work.

Sixteen units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal semester's program for all students. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points. Any course in which a student received a passing grade may be used in the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student will be allowed to register for less than 12 units without the approval of the academic dean of his department.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus one point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D; otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. Ordinarily to change an I to another grade the work must be completed within a year. In case of failure in a course, no credit is given until the course has been repeated.

To qualify for a certificate in any curriculum or for a diploma of graduation or for a transcript of record with recommendation, in transferring to another collegiate institution, a student must have earned as many grade points as the number of units he has attempted; that is, he must have attained an average of at least C grade in all work undertaken at the college. On a transcript of record for a student whose scholarship is below a C average, the honorable dismissal shall be qualified by the phrase "except for scholarship."

ELIGIBILITY FOR PRACTICE TEACHING

No student shall be eligible for practice teaching (Education 116) who has not completed 75 units, passed the Fundamentals Test or its equivalent, and whose entire record, and also his record for the preceding semester, does not average C grade.

PROBATION AND DISQUALIFICATION

A scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the college.

Any student whose scholarship record shows a cumulative deficit of 12 or more grade points for all work undertaken in the college to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the college. Probationary status may be continued until the cumulative grade-point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

SPECIAL EXAMINATIONS

Special examinations are classified as (1) matriculation examinations; (2) final examinations taken at other than the regular time; (3) examinations taken for the purpose of removing conditions; (4) examinations for advanced standing.

For every special examination given, the student shall pay a fee of two dollars at the business office. The instructor shall give such examination only on the presentation by the student of a receipt showing that the fee has been paid.

EXAMINATIONS AT SPECIAL TIMES

No final examinations shall be given to individual students before the regular final. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements with the instructor to have an incomplete grade reported and must take the deferred final examination not later than the end of the second semester following that in which the incomplete was given. No exceptions shall be made to this rule without the approval of the dean of the department and the instructor concerned.

CONDUCT OF EXAMINATIONS

All final examinations shall be written in Blue Books or other forms which shall be furnished by the college and distributed by the instructor at the beginning of the examination period. No books or papers of any kind shall be brought into the examination room, except by special order of the instructor.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer on a "change of registration card," which must be filed in the Registrar's Office. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. A withdrawal after the sixth week of a semester except for reasons beyond the student's control is interpreted as a failure in the course. A student who is obliged on account of ill health to withdraw completely from college after the sixth week may, upon presentation of a physician's certificate, have his courses dropped from his record without penalty if he has maintained a C average in all his studies up to the beginning of the current semester. Any student who withdraws completely from college for any other cause after the sixth week may have those courses in which his grade was C or better at the time of his withdrawal dropped from his record without penalty, but a grade of F (failure) will be recorded for all courses in which his work was below C at that time.

PLACEMENT SERVICE

A Placement Office is maintained by the college as a clearing house of employment information for superintendents and employing boards and students of the college. While the purpose of this office is to assist candidates in securing positions, it is the primary aim of the office to bring about a better adjustment of the teacher to the community. A complete record of college attainments is kept in a confidential file for each registrant of the office and this material is made available to employers. Recommendations are based on records which indicate every item in the candidate's equipment, and particular care is taken to select in each case the candidate who can best meet the requirements of the position. A fee of \$2 is payable each year in which active service is desired.

STUDENT LIFE

ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied, but are well coordinated through the central student body organization, The Associated Students. The following list indicates the major activities:

Art Guild, College Orchestra, El Club Azteca, Engineering Club, our Arts Guild, Gamma Psi (English); International Relations Club, Men's Glee Club, Mu Gamma (Music), Pendragon, Philharmonia, Psychology Club, Spanish Club, Skull and Dagger, Treble Clef Club.

National Honor Societies: Delta Kappa (Chemistry), Kappa Delta (Education), Pi Gamma Mu (Social Science).

Men: Associated Men Students, Blue Key (national), College Band, Physical Education Club, Alpha Phi Omega (national), Delta Pi Beta, Epsilon Eta, Eta Omega Delta, Kappa Phi Sigma, Omega Xi, Phi Lambda Xi, Sigma Lambda, Tau Delta Chi.

Women: Associated Women Students, Cap and Gown, College W. C. A., Women's Athletic Association, Alpha Phi Delta, Alpha Sigma Phi, Delta Chi Phi, Gamma Phi Zeta, Kappa Theta, Phi Kappa Upsilon, Phi Sigma Nu, Sigma Pi Theta, Tau Zeta Rho, Theta Chi.

Men's Athletics: Football, baseball, basket ball, track, swimming, tennis, cross country, wrestling, fencing, and golf.

Women's Athletics: Rowing, swimming, tennis, golf, horseback riding, and seasonal sports.

Publications: The Aztec (weekly), Del Sudoeste (year book), and Palenque (quarterly).

ALUMNI ASSOCIATION

The college has an active alumni association. Since its reorganization in March, 1929, the Association has steadily gained in membership. The annual Homecoming is an important event each year; other meetings take place on dates of important athletic contests. The Association also sponsors the organization of Aztec clubs in various communities. Information concerning the Association may be obtained by writing the secretary at the college.

DEGREE REQUIREMENTS

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS IN THE CURRICULA WITH TEACHING CREDENTIALS

Total Units, Length of Time, and Residence

A minimum of 124 units of college work is required, representing a four-year course. Students who are planning to secure California teaching credentials through graduation from this college are urged to follow the curriculum pattern for the credential or credentials which they wish to earn, throughout the entire four years. Not less than 30 units must be earned in the junior and senior years; at least 30 units of work at this college; twenty-four of these residence units must be taken with the rank of senior, at least twelve of which must be taken in the fall or spring semester of the final year before graduation.¹

Admission to Upper Division Teacher Training

Students are not admitted to upper division status in teacher training on the basis of merely having completed the lower division work. Application for admission to upper division work should be made during the final semester of the sophomore year and a committee of the faculty appointed for this purpose, will review the candidate's records and recommendations regarding admission. In the main, this committee will be guided by the following factors:

1. The completion of the lower division work of a given curriculum with a scholastic record equal to or better than the average of all students in the lower division.
2. Physical fitness as shown by a prescribed examination given by a college physician.

¹ Graduates of this college and teachers in service in California until the summer of 1935 to complete the requirement without attending during the academic year. Graduates from the three-year (ninety-unit) course, which was in force from 1928 to 1930, may earn the requisite number of units to make a total of one hundred twenty by summer session and extension work, provided they attend for consecutive summers of nine weeks each immediately before graduation or one summer session of nine weeks with six units of extension during the same year, taken at this college or in courses given by the University of California by members of the San Diego State Teachers College faculty. From eight to ten units must be taken during the summers in special "residential degree" courses. Graduates from the three-year curriculum and other teachers in service in California will be granted the privilege of the arrangement of two summer sessions with the additional qualifications that all lower division requirements must be satisfied before they are accepted as candidates and their subject matter offering must be made to conform to present standards. Complete information concerning details may be obtained by writing to the Registrar.

3. Fitness for teaching, to be based on recommendations by members of the faculty and on the judgment of the committee as a result of personal interviews with the candidate.

Upper Division Course Requirements

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under heading Courses of Instruction); junior standing requires 60 units of credit. Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Summary of Basic Requirements, Common to All Curricula in This Group

Education	21 units
Lower division courses in English.....	6 units
Lower division courses in natural science.....	12 units
Physical Education activity.....	2 units
Political Science 101, or substitute.....	2 units
Psychology 1A.....	3 units
Lower division courses in social science.....	12 units

Explanation of the basic requirements:

In the different curricula leading to the various teaching credentials, specific courses are required in the various subjects listed in the summary which may total more than the minimum given in the summary. In addition, the following information must be taken into consideration in connection with fulfilling the requirements in each subject.

English

Courses in journalism or in speech arts are not accepted in satisfying this requirement.

DEGREE REQUIREMENTS FOR THE CURRICULA WITH TEACHING CREDENTIALS

Natural Science

The electives may be reduced to a minimum of 6 units if the student presents acceptable grades from the high school in natural science in laboratory courses offered exclusively for the third or fourth year students. In general, each year's work of high school science will thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work; merely an exemption of the requirements will be permitted. The college courses which may be used in satisfaction of this requirement are: Agriculture 20, Astronomy 1, 5, 11; Biology 10A-10B, Botany 2A-2B, 4, 5, 7; Chemistry 1A-1B, 6A-6B, 7-8; Geography 1, 3; Geology 1A, 1B; Physics 1A-1B, 1C-1D, 2A-2B, 3A-3B; Zoology 1A-1B.

Political Science 101

Political Science 113 or History 171A-171B or History 173A-173B will be accepted as substitutes for this requirement.

Social Science

Courses in the following departments may be used in satisfaction of this requirement: Anthropology, Economics (except 14A-14B and 18A-18B), Geography (except 1 and 3), History, Political Science, Sociology, Economics.

Major and Minor Requirements

For the elementary school credential, two academic teaching minors are required; for the junior high school credential, or for both the elementary and junior high school credentials together, an academic teaching major and an academic teaching minor are required. An academic teaching major consists of 24 units in a field other than education, twelve of which must be in the upper division. An academic teaching minor consists of 12 units in a field other than education, six of which must be in the upper division. Academic teaching majors and minors may be established in the following fields: English, foreign language,

mathematics, natural sciences,¹ and social sciences² (economics, geography, history, political science, social economics). Academic teaching minors may also be established in art, music, and physical education.

Combinations of Credentials

In the case of students seeking more than one teaching credential, the curriculum for each credential must be completed in full, with only such exceptions as are indicated in the requirements.

Scholarship

The number of grade points acquired in this college by the candidate for a degree must be equal to the number of units attempted. (See page 26 for an explanation of scholarship grades and grade points.)

Preparation for Graduate Work

Students who take the A.B. degree with only a special credential and who contemplate doing graduate work for a master's degree at another institution of higher learning in an academic field, will find it advantageous to use their electives to lay a foundation for that work. A student who plans to do graduate work in the field of his academic teaching major is advised so to arrange his electives as to complete the secondary major to avoid the necessity of making up an undergraduate deficiency.

¹ Candidates for the academic teaching major in the field of the natural sciences must meet the general requirement of twelve units of natural science in the lower division including Biology 10A-10B, unless taken in high school. The remaining eighteen units must be chosen so as to include a year course in physics and a concentration of twelve units, at least six of which are upper division, in one major subject (botany, chemistry, physics, zoology).

² Candidates for an academic teaching major in the field of the social sciences must meet the general requirements of twelve units of social science in the lower division including Geography 2 and Social Economics. The remaining eighteen units must be chosen so as to include a year course of six units in history in either the lower or upper division and a concentration of twelve units, at least six of which are upper division, in one major subject (economics, geography, history, political science).

CURRICULA LEADING TO TEACHING CREDENTIALS

A.B. Degree With Elementary School Credential

FRESHMAN YEAR

First Semester—	Units
Biology 10A, ¹ General (unless taken in high school)-----	3
Geography 1, Elements (Natural Science)-----	3
Physical Education 1A or 36A-----	$\frac{1}{2}$
Art 6A, Structure-----	2
Second Semester—	
Biology 10B, ¹ General (unless taken in high school)-----	3
Geography 2, Regions (Social Science)-----	3
Physical Education 1B or 36B-----	$\frac{1}{2}$
Education 19, Art in the Elementary School-----	2
Either Semester—	
Social Economics 10, Introduction to Social Science-----	3
Electives, ² including two minors ³ (for the year)-----	12
	32

SOPHOMORE YEAR

First Semester—	
Psychology 1A, General-----	3
Music 1A, Music Reading and Ear-training-----	2
Physical Education 1C or 37-----	$\frac{1}{2}$ or
Second Semester—	
Education 17, Music in the Elementary School-----	2
Physical Education 53, Physical Education in the Elementary School, or Physical Education 54, Administration of Physical Education -----	2
Physical Education 1D or 38A-----	$\frac{1}{2}$
Either Semester—	
Education 1, Introductory Principles-----	3
Art 61A, Elementary Crafts-----	2
Art 61B, Elementary Crafts-----	2
Electives, including two minors ⁴ (for the year)-----	14 $\frac{1}{2}$ or
	32

¹ Possible substitutions for the requirement in Biology 10A-10B.

1. Botany 2A-2B and Zoology 1A-1B—16 units.

2. High school Botany plus Zoology 1A-1B.

3. High school Zoology plus Botany 2A-2B.

4. High school Botany plus high school Zoology.

² See Summary of Basic Requirements.

³ Unless minor is English, Natural Science or Social Science.

⁴ If 6 units in minor taken in freshman year, none needed in sophomore year.

JUNIOR YEAR

First Semester—	Units
Education 125A, Curricular Activities—Lower Levels-----	3
Education 126, Children's Literature-----	2
Education 129, Mathematics in the Elementary School-----	2
Psychology 102, Genetic-----	3
Second Semester—	
Education 116, Practice Teaching ⁷ -----	3
Education 125B, Curricular Activities—Upper Levels-----	3
Either Semester—	
Education 108, Educational Measurements-----	3
Physical Education 151, Health Education-----	2
Political Science 101 (or substitute)-----	2
Electives, including two minors (for the year)-----	7
	30

SENIOR YEAR

First Semester—	
Education 116, Practice Teaching ⁷ -----	6
Second Semester—	
Education 106, ^a philosophy-----	3
Electives, including two minors ^b (for the year)-----	21
	30

SUMMARY

Art 6A, 61A, 61B-----	6
Education 1, 17, 19, 106, 108, 116, 125A, 125B, 126, 129-----	32
English-----	6
Music 1A-----	2
Natural Science (incl. Biology 10A-10B and Geography 1)-----	12
Physical Education 1A-B-C-D or 36A-36B, 37A, 38A; 53; 151--	6 or 6½
Political Science 101-----	2
Psychology 1A, 102-----	6
Social Science (incl. Social Economics 10 and Geography 2)--	12
Electives, including two academic teaching minors-----	39½ or 40
	124

^a If 6 units in minor taken in junior year, none needed in senior year.

^b Not required if junior high school or special credential is earned at the same time.

⁷ Candidates for the elementary school credential in combination with any other type of credential are required to do not less than 6 units of practice teaching in the elementary school.

A.B. Degree With Junior High School Credential

FRESHMAN YEAR

First Semester—	Units
Biology 10A, ¹ General (unless taken in high school)-----	3
Geography 1, Elements (Natural Science)-----	3
Physical Education 1A or 36A-----	½
 Second Semester—	
Biology 10B, ¹ General (unless taken in high school)-----	3
Geography 2, Regions (Social Science)-----	3
Physical Education 1B or 36B-----	½
 Either Semester—	
Social Economics 10, Introduction to Social Science-----	3
Electives, ² including major and minor ³ (for the year)-----	16
	32

SOPHOMORE YEAR

First Semester—	
Psychology 1A, General-----	3
Physical Education 1C or 38A-----	½
 Second Semester—	
Physical Education 1D or 38B-----	½
 Either Semester—	
Education 1, Introductory Principles-----	3
Electives, ² including major and minor ⁴ (for the year)-----	25
	32

JUNIOR YEAR

First Semester—	
Education 125B, Curricular Activities—Upper Levels-----	3
Political Science, 101, American Institutions (or substitute)-----	2
Psychology 102, Genetic-----	3
Education 108, Educational Measurements-----	3
 Second Semester—	
Education 116, Practice Teaching-----	3

¹ Possible substitutions for the requirements in Biology 10A-10B:

1. Botany 2A-2B and Zoology 1A-1B—16 units.

2. High school Botany plus Zoology 1A-1B.

3. High school Zoology plus Botany 2A-2B.

4. High school Botany plus high school Zoology.

² See Summary of Basic Requirements.

³ Unless major or minor is English, Natural Science or Social Science.

⁴ If 6 units in minor taken in freshman year, none needed in sophomore year.

Either Semester—		Units
Curriculum in Field of Academic Major-----		2
Physical Education 151, Health Education-----		2
Electives, including major and minor (for the year)-----		12
		30

SENIOR YEAR

First Semester—		
Education 116, Practice teaching-----		3

Second Semester—		
Education 121, Principles of Secondary Education-----		3

Either Semester—		
Education, elective -----		2
Electives, including major and minor ⁵ (for the year)-----		20
		30

SUMMARY

Education 1, 108, 116, 121, 125B, Curriculum in Field of Academic Major, and elective in Education-----	22
English -----	6
Natural Science (incl. Biology 10A-10B and Geography 1)----	12
Physical Education 1A-B-C-D or 36A-36B, 38A-38B; 151-----	4
Political Science 101-----	2
Psychology 1A, 102-----	6
Social Science (incl. Social Economics 10 and Geography 2)---	12
Electives, including academic teaching major and minor-----	60
	124

⁵ If 6 units in minor taken in junior year, none needed in senior year.

A.B. Degree With Special Credential in Art

This course leads to the A.B. degree and to the Special Credential in Art which entitles the holder to teach art in senior high, junior high and elementary schools.

LOWER DIVISION

	Units
Art 6A-6B, Structure -----	4
Art 61A-61B, Elementary Crafts -----	4
Education 1, Introductory Principles -----	3
Education 19, Art in the Elementary School -----	2
†English -----	6
†Natural Science -----	12
Physical Education 1A-1B, 1C-1D (men) ; 36A-36B, 38A-38B (women) -----	2
Psychology 1A, General -----	3
†Social Science, incl. Social Econ. 10, Intro. to Social Science --	12
Electives, including additional Art for major -----	16
	64

UPPER DIVISION

Education 116, Practice Teaching (4 units in special field) --	6
Education 119, Art in the Junior High School -----	2
Education 121, Principles of Secondary Education -----	3
Education 125B, Curricular Activities—Upper Levels -----	3
Education, electives (suggested: Education 106 or 108 or 130) --	3
Political Science, 101, American Institutions (or substitute) --	2
Electives, including additional courses in Art -----	41
	60

SUMMARY

Art major -----	50
Education -----	22
English -----	6
Natural Science -----	12
Physical Education -----	2
Political Science 101, American Institutions -----	2
Psychology -----	3
Social Science (including Soc. Econ. 10) -----	12
Electives -----	15
	124

† See Summary of Basic Requirements.

A.B. Degree With Special Credential in Commerce

This course leads to the A.B. degree and to the Special Credential in Commerce, which entitles the holder to teach commercial subjects in senior high and junior high schools.

In addition to the following academic requirements, satisfactory evidence of one-half year, or 1000 hours of approved experience in the field must be submitted.

LOWER DIVISION

	Units
Economics 1A-1B, Principles of-----	6
Economics 11, Economic History of the United States-----	3
Economics 14A-14B, Accounting-----	8
Economics 18A-18B, Commercial Law-----	6
Education 1, Introductory Principles-----	3
English 1A-1B, Composition-----	6
Geography 1, Elements (Natural Science)-----	3
Geography 2, Regions (Social Science)-----	3
Mathematics 2, Mathematics of Investment-----	3
Natural Science-----	9
Physical Education 1A-1B-1C-1D (men); 36A-36B-38A-38B (women)-----	2
Psychology 1A, General-----	3
Secretarial Training A, Business Mathematics-----	1
Secretarial Training 3A, Office Methods and Appliances-----	3
Social Economics 10, Introduction to Social Science-----	3
Elective-----	3
	65

UPPER DIVISION

Economics 121, Business Administration-----	3
Economics 140, Statistical Methods-----	3
Economics 160A-160B, Advanced Accounting-----	6
Economics 161, Cost Accounting-----	3
Economics 163, Machine Accounting-----	3
Education S21, Penmanship Methods (to be taken in Summer Session)-----	2
Education 116, Practice Teaching-----	6
Education 121, Principles of Secondary Education-----	3
Education 163, Stenography-----	2
Education 164, Bookkeeping-----	2
Education 165, Typewriting-----	2
Education, Elective (Educational Psychology recommended)-----	3
Geography 141, Economic Geography-----	3
Political Science 101, American Institutions-----	2
Secretarial Training 1A-1B, Typewriting-----	6
Secretarial Training 5A-5B, Stenography-----	10
	61

See Summary of Basic Requirements.

SUMMARY

	Units
Economics -----	41
Education -----	23
English -----	6
Geography -----	9
Mathematics -----	3
Natural Science (in addition to Geography 1) -----	9
Physical Education -----	2
Political Science 101, American Institutions -----	2
Psychology -----	3
Secretarial Training -----	20
Social Economics 10—Introduction to Social Science -----	3
Elective -----	3
	124

A.B. Degree With Special Credential in Music**

This course leads to the A.B. degree with a Special Credential in Music entitling the holder to teach music in senior high, junior high, and elementary schools.

	Units
Education 1, Introductory Principles (sophomore year)-----	3
Education 17, Music in the Elementary School-----	2
‡English -----	6
*Music, Applied -----	18
Music 1A-1B, 1C-1D, or 1B, 1C, 1D, 1E, Music Reading and Ear Training-----	8
Music 2A-2B, Appreciation and History-----	4
Music 4A-4B, Elementary Harmony-----	6
Music 11, or 12, or 20-----	2
‡Natural Science-----	12
Physical Education 1A-1B, 1C-1D (men) ; 36A-36B, 38A-38B (women) -----	2
Psychology 1A, General (sophomore year)-----	3
‡Social Science, incl. Soc. Econ. 10, Intro. to Social Science--	12

UPPER DIVISION COURSES

Education 116, Practice Teaching (at least 4 units in Music)	9
Education 121, Principles of Secondary Education-----	3
Education 127, Music in the Secondary School-----	2
Education 145, Org. and Adm. of Music Education-----	2
Music 103A-103B, Appreciation and History-----	2
Music 105A-105B, Advanced Harmony-----	4
Music 107A-107B, Conducting-----	2
Music 108, Instrumentation-----	2

* Applied Music to be distributed as follows:

Orchestral instrument(s) (Including at least one year of Orchestra (if qualified) and/or Instrumental Ensemble)----	6
**‡‡ Piano -----	6
Voice -----	6

(Applied Music credits, 1½ units per semester, for not less than one lesson per week, with six hours practice per week, totaling at least ten hours instruction and one hundred hours practice per semester. Applied Music is taken under outside private teachers, subject to the approval and supervision of the music department of the college, which determines credit and grades by examination. Upper division credit not allowed for beginning work in applied music.)

‡ See Summary of Basic Requirements.

‡‡ Minimum attainment for completion of Piano Requirement in Music curriculum is the ability to play accompaniments such as are found in the Teachers Manuals of the Progressive Music Series, Books Three and Four.

** Applicants for admission to the Music curriculum will be required to take an entrance examination in Piano, to determine their ability to play satisfactorily hymns and folk songs of the type found in the Golden Book of Favorite Songs. Those not able to meet this requirement must study piano without credit until able to pass such an examination. They may also take examinations in Fundamentals of Music, and Harmony, for advanced standing in these subjects.

UPPER DIVISION COURSES—Continued

	Units
Music 111, or 112, or 120-----	2
Political Science 101, American Institutions (or substitute) --	2
Electives -----	16
	124

SUMMARY

Education -----	21
English -----	6
Music major -----	50
Natural Science -----	12
Physical Education -----	2
Political Science 101, American Institutions-----	2
Psychology -----	3
Social Science (including Soc. Econ. 10) -----	12
Electives -----	16
	124

A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high, and elementary schools.

MEN

LOWER DIVISION

	Units
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A, General-----	4
Education 1, Introductory Principles (sophomore year)-----	3
English-----	6
Hygiene 1-----	2
Natural Science-----	2 or 4
Physical Education:	
1A-1B, 1C-1D-----	2
6A, Tennis-----	$\frac{1}{2}$
54, Administration-----	2
62A, 62B, Gymnastic Activities-----	4
*Sports and Athletics-----	3
Psychology 1A, General (sophomore year)-----	3
Red Cross Swimming Test-----	$\frac{1}{2}$
Social Science, incl. Soc. Econ. 10 and 50-----	12
Speech Arts 1A, Elements of Public Speaking-----	3
Zoology 1B, General-----	4
Electives-----	11
	64

UPPER DIVISION

Education 116, Practice teaching-----	6
Education 121, Principles of Secondary Education-----	3
Education 125B, Curricular Activities--Upper Levels-----	3
Education, elective-----	6
Physical Education:	
101, Emergencies-----	1
151, Health Education-----	2
155, Applied Anatomy-----	2
156A-156B, Sports Methods-----	4
163, Aquatics-----	$1\frac{1}{2}$
165, Self Defense-----	$1\frac{1}{2}$
166, Technique of Officiating-----	1
169, Technique of Teaching Activities-----	3
171, Community Recreation-----	2
172, Principles-----	2
180, Tests and Measurements-----	2
*Sports and Athletics-----	3

† See Summary of Basic Requirements.

* Men majoring in Physical Education must actively participate in three sports each year.

MEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions (or substitute)---	2
Psychology 102, Genetic (first semester, junior year)-----	3
Zoology 100, Embryology-----	3
or	
Zoology 114A, Genetics-----	2
or	
Zoology 121, Entomology-----	3
Electives -----	9-10
	60

SUMMARY

Education -----	21
English -----	6
Speech Arts 1A-----	3
Natural Science (including Biol. 10A-10B or substitute and Zoology 1B) -----	12
Physical Education major-----	29
Political Science 101, American Institutions-----	2
Psychology -----	6
Social Science (including Soc. Econ. 10 and 50)-----	12
Zoology (upper division)-----	2 or
Electives -----	27-28
	124

WOMEN
LOWER DIVISION

	Units
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A, General-----	4
Education 1, Introductory Principles (sophomore year)-----	3
English-----	6
Hygiene 2, Personal and Civic-----	2
Natural Science-----	2-4
Physical Education:	
36A, Formalized Activities, Group Games, Stunts-----	$\frac{1}{2}$
36B, Athletic Games-----	$\frac{1}{2}$
37, Game and Rhythmic Activities-----	1
38A, Recreational Activities-----	$\frac{1}{2}$
53, Physical Education in the Elementary School-----	2
55A-55B, Swimming-----	1
56, Tennis-----	$\frac{1}{2}$
57, Golf-----	$\frac{1}{2}$
58, Rowing-----	0
Psychology 1A, General-----	3
Social Economics 50, General Sociology-----	3
Social Science, incl. Soc. Econ. 10, Intro. to Social Science--	9
Speech Arts-----	3
Zoology 1B-----	4
Electives-----	16 $\frac{1}{2}$
	64

UPPER DIVISION

Education 108, Educational Measurements-----	3
Education 116, Practice Teaching-----	6
Education 121, Principles of Secondary Education-----	3
Education 125A, Curricular Activities—Lower Levels-----	3
Education 140, Educational Statistics-----	
or	
Education 106, Philosophy-----	3
Physical Education:	
102, Emergency and Safety Programs-----	1
151, Health Education-----	2
154, Applied Anatomy-----	2
157A-157B, Sports Methods-----	4
158, Stunts and Tumbling-----	1
160, Formalized Activities-----	2
161, Folk Dancing-----	2
164, Dancing-----	2
169, Technique of Teaching Activities-----	3
170, Recreational Leadership-----	2
173, Principles-----	2

WOMEN—Continued

UPPER DIVISION—Continued

	Units
153, Administration of Secondary Physical Education-----	2
175, Current Problems-----	2
177, Individual Program Adaptations-----	2
Political Science 101, American Institutions (or substitute)---	2
Psychology 102, Genetic (first semester, junior year)-----	3
Zoology 100, Embryology-----	
or	
Zoology 106, Comparative Anatomy of the Vertebrates-----	
or	
Zoology 121, Entomology-----	3
Electives -----	5
	60

SUMMARY

Education -----	21
English -----	6
Hygiene -----	2
Speech Arts -----	3
Natural Science (including Biol. 10A-10B or substitute, and Zoology 1B) -----	12
Physical Education major-----	35½
Political Science 101, American Institutions-----	2
Psychology -----	6
Social Science (including Social Economics 10 and 50)-----	12 uni
Zoology (upper division)-----	3
Electives -----	21½
	124

Diploma of Graduation

A diploma of graduation carrying with it any of the credentials to college is authorized to grant or any combination of them may be granted to the holder of a bachelor's degree from an accredited college upon the completion of a minimum of 24 units. Ordinarily at least one semester of residence during the academic year is required subsequent to securing the degree; the remainder of the work may be done in the summer session or, in the case of students who had attended the college prior to attaining the degree elsewhere, in credit earned as an upper division student. The candidate for a diploma must offer the equivalent of all of the requirements listed in the curriculum with the A. B. degree with the credential or credentials sought.

Administration and Supervision Credentials

The State Board of Education has authorized this college to make recommendations for the issuance of Administration and Supervision credentials for holders of Elementary and Junior High School credentials who have completed the required 15 units beyond the requirements for the teaching credential and who have completed two years of successful teaching experience. *But holders of general secondary credentials may*

take the required courses in and receive recommendation from an accredited graduate school, even though they may wish to qualify for administrative or supervisory work only on the elementary or junior high school level.

In order to secure the recommendation of this college for either one of these credentials, the following number of the 15 required units must be completed at this institution:

1. Graduates of this college—6, subsequent to graduation.
2. Graduates of other institutions—9.
3. County certified teachers—12.

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND FOR THE DEGREE OF BACHELOR OF ARTS IN THE PRESECONDARY CURRICULA

This course leads to the A.B. degree. Completion of the requirements of this curriculum also enables the graduate to satisfy the undergraduate requirements for the General Secondary credential which with post-graduate work, will enable the holder to teach in a senior high school or junior college. The degree courses are limited to major in art, chemistry, commerce, economics, English, geography, history, mathematics, music, Romanic languages, and zoology.

Total Units, Length of Time, and Residence

The junior certificate will be granted on the completion of 64 units of college work and the degree on the completion of 124 units, representing a four-year course. Certain requirements of the junior certificate may be met by courses taken in the high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree. Not less than 50 units must be earned in the junior and senior years; at least 30 units of work at this college; twenty-four of these residence units must be taken with the rank of senior, at least twelve of which must be taken in the fall or spring semester of the final year before graduation.

Upper Division Course Requirements

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under heading Courses of Instruction); junior standing requires 60 units of credit. Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Minor Subject

A minimum of 12 units in a minor subject is required, at least 10 units of which shall be in upper division courses completed in the junior and senior years. Minors are available in the following subjects: art, chemistry, economics, English, foreign language, geography, history, mathematics, music, physics, political science, psychology, zoology.

Subject Matter Requirements in the Lower Division

Physical Education	2 units
Hygiene 1 or 2	2 units
English	6 units
Foreign Languages	15 units
Social Science, including Social Economics 10	12 units
Natural Science	12 units
Year-course in foreign language in addition to the 15-unit requirement, or Mathematics, or Philosophy	6 units
Minor, unless included in one of the above requirements, see above	6 units
Lower division subjects required for the major. See page 51.	
Electives to make total of 64 units.	

Explanation of lower division requirements listed above:

English

This requirement may be satisfied either in the freshman year or in the sophomore year. To be chosen from the following year-courses: English 1A-1B, 4A-4B, 12A-12B, 52A-52B, 56A-56B.

Foreign Language

At least 15 units in not more than two languages required in the lower division, except that only 10 units in a modern language are required in the commerce major. Each year of high school work in foreign language will be counted in satisfaction of 3 units of this requirement. A minimum of two high school units is acceptable in any language except Latin, in which one unit is permissible.

DEGREE REQUIREMENTS IN THE PRE-SECONDARY CURRICULA

Social Science

Courses must be chosen from the following list: Anthropology 50B, Economics 1A-1B,* 11, 18A-18B, Geography 1-2,* History 4A-4B, 5A-5B,* 8A-8B,* Political Science 1A-1B,* Social Economics 10, 50.

Natural Science

Twelve units are required from the following lists of high school and college courses.

Only those high school courses that are offered exclusively for students in the third or fourth year may be used. Each year of high school work in science will be counted in satisfaction of 3 units of the requirement. Not more than 6 units may be counted from the following high school laboratory courses: Physics,* Chemistry,* Botany, Biology,* Physiology, Zoology.

Six or more units must be chosen from the following college courses: Astronomy 1, 11, Biology 10A-10B,* Botany 2A*-2B,* 4, 5, Chemistry 1A*-1B,* 6A-6B,* 7-8,* Geology 1A, 1B, Physics 2A-2B, 3A-3B, 1A-1B,* 1C-1D,* Zoology 1A*-1B,* 100.*

Additional Year-Course

In addition to the minimum requirement of 15 units in not more than two languages, of 6 units in English, and of year courses in high school elementary algebra and plane geometry, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses.

Latin: Two years of high school courses in Latin.

Mathematics: 3A-3B, 7A-7B, or any combination of 1, 3A, 8. Students with the Commerce major may take Mathematics 1 and 2, Mathematics B, C and 2, or equivalent.

Philosophy: 5A-5B.

Electives

Among both electives and required work, a total of not more than 12 units of the applied and vocational courses listed below will be counted toward the junior certificate or the A.B. degree, in both lower and upper division combined:

Agriculture 20; Art 61A, 61B; Journalism 53A-53B, 153A-153B; Music 1A, 1B, 1C-1D, 1E, 19A-19B, 19C-19D, 20A-20B, 20C-20D, 110A-110B, 119A-119B, 119C-119D, 120A-120B, 120C-120D, all courses in Applied Music, and all musical organizations; Physical Education 2A-B to 14A-B, 37, 53, 54, 55, 56, 57, 62A, 62B, 151, 153, 155, 156, 156B, 157A, 157B, 160, 163, 165, 166, 168, 170, 171, 172, 173, 175, 177, 178A, 178B, 179, 180; Secretarial Training, all courses.

* At least one of the courses marked with an asterisk must be chosen to meet the social science requirement and the natural science requirement respectively.

Recommended Program for Meeting the Lower Division Requirements

	FRESHMAN YEAR	Units Sem. I	Units Sem. II
Social Economics 10 -----		3	--
Physical Education -----		$\frac{1}{2}$	$\frac{1}{2}$
Hygiene 1 or 2 -----		2	--
English -----		3	3
Foreign Language or electives -----		3-5	3-5
Social Science -----		--	3
Natural Science and/or electives, including preparation for the major -----		$\frac{1}{2}$ -2 $\frac{1}{2}$	4 $\frac{1}{2}$ -6 $\frac{1}{2}$
		16	16
	SOPHOMORE YEAR		
Physical Education -----		$\frac{1}{2}$	$\frac{1}{2}$
Foreign Language -----		3	3
Additional year course -----		3	3
Social Science -----		3	3
Natural Science or electives -----		3	3
Electives, including preparation for the major -----		3 $\frac{1}{2}$	3 $\frac{1}{2}$
		16	16

Lower Division Subjects Required for the Pre-Secondary Majors

The student is advised to choose his major as early in his college course as practicable so that he may be able to plan his work according to the major requirements. Failure to meet the lower division requirements of the major department before the junior year may make it impossible to satisfy the upper division requirements within the normal period of two years.

Art

Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Chemistry

Chemistry 1A-1B with an average grade of C or better, Chemistry A-6B or 7-8, Physics 2A-2B and 3A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in chemistry or to transfer to another college, and there work for a degree with a major in chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Commerce

Economics 1A-1B, 11, 14A-14B (6 units) ; English 1A-1B ; Geography 1-2 ; Mathematics* 1, and 2 ; History 4A-4B or 8A-8B or Political Science 1A-1B.**

Economics

Economics 1A-1B and at least one of the following : Political Science 1A-1B ; History 4A-4B ; History 8A-8B ; Psychology 1A, 4A ; Geography 1 and 2. Recommended : Social Economics 50 ; Economics 14A-14B 18A-18B.

English

English 1A-1B and nine units from 12A-12B, 52A-52B, 56A-56B. Recommended : A reading knowledge of German or French.

Foreign Languages

Group major : French A-B, C-D and Spanish A-B, C-D.

The group major requirements are based on the assumption that the

The list beginning Economics 1A-1B is the summary of all lower division requirements for the commerce major and belongs at the bottom of the page under the double star (**).

Geography

Geography 1, 2, 3 and Geology 1A-1B. Recommended : A reading knowledge of French or German.

History

History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-5B.

Mathematics

Mathematics 3A-3B, 4A-4B, and 8. With permission of the department 7A-7B may replace 3A-3B, and 14A may replace 4A-4B. Recommended : Physics, Surveying, Descriptive Geometry, Astronomy and a reading knowledge of French and German.

Music

Music 1A-1B, 2A-2B, 4A-4B, and 2 units of electives in music. The electives in music in both lower and upper division must include at least

* For the equivalent of Mathematics 1, see the prerequisite to Mathematics 2.

** Summary of all lower division requirements for the commerce major

3 units in Applied Music (study of voice, or an instrument), of which at least 3 units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 50.)

Zoology

Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and 5.

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Subject Matter Requirements in the Upper Division

Psychology 1A (unless elected in lower division)-----	3	units
Political Science 101 or 113-----	2 or 3	units
Education -----	12	units
Minor (minimum in upper division courses)-----	6	units
Major -----	—	
Electives to make a grand total of 124 units.		

Explanation of upper division requirements listed above:

Political Science

History 171A-171B or History 173A-173B may be substituted to meet this requirement.

Education

A minimum of 12 units in education is required and a maximum of 8 units will be counted toward the degree. The courses in education for the minimum requirement must be chosen from the following list:

Ed. 1, Introductory Principles (lower division elective); Ed. 121, Principles of Secondary Education; Ed. 106, Philosophy of Education; Ed. 107, History of Education; Ed. 108, Educational Measurements; Ed. 109, Educational Administration and Supervision; Ed. 137, Comparative Education; Ed. 130, Educational Psychology; Ed. 140, Elementary Educational Statistics; Psychology 102, Genetic Psychology.

Major

The specific requirements in each major field are listed in the paragraphs immediately following.

Electives

These must be so chosen that, with the required subjects, a minimum of 40 units will be completed in upper division courses after the student has attained upper division standing. See, also, restrictions concerning the choice of applied and vocational courses, as explained on page 50.)

Major Requirements in the Various Fields

Art

Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150, 152A, 195, and ten upper division elective units in art.

Commerce

Economics 1A-1B, 11, 14A-14B (6 units); English 1A-1B; Geography 1-2; Mathematics* 1, and 2; History 4A-4B or 8A-8B or Political Science 1A-1B.**

Economics

Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B; History 8A-8B; Psychology 1A, 4A; Geography 1 and 2. Recommended: Social Economics 50; Economics 14A-14F 18A-18B.

English

English 1A-1B and nine units from 12A-12B, 52A-52B, 56A-56F. Recommended: A reading knowledge of German or French.

Foreign Languages

Group major: French A-B, C-D and Spanish A-B, C-D.

The group major requirements are based on the assumption that the student will have taken courses in the high school, equivalent to the college course in elementary French or Spanish.

Economics 1A-1B -----	6 un.	History 4A-4B, 8A-8B or	
Economics 11 -----	3	Political Science 1A-1B--	6 un
Economics 14A-14B -----	6	Hygiene -----	2
Economics 18A-18B -----	6	Mathematics* 1, 2 -----	6
English 1A-1B -----	6	Natural Science -----	12
Foreign Language -----	10	Physical Education -----	2
Geography 1-2 -----	6	Social Economics 1 -----	2

Geography

Geography 1, 2, 3 and Geology 1A-1B. Recommended: A reading knowledge of French or German.

History

History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1A-1F Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one of the three history courses at a time. Students who wish to major in history and who have had less than two years European history in high school must take History 4A-4B or 5A-5B.

Mathematics

Mathematics 3A-3B, 4A-4B, and 8. With permission of the department 7A-7B may replace 3A-3B, and 14A may replace 4A-4B. Recommended Physics, Surveying, Descriptive Geometry, Astronomy and a reading knowledge of French and German.

Music

Music 1A-1B, 2A-2B, 4A-4B, and 2 units of electives in music. The electives in music in both lower and upper division must include at least

* For the equivalent of Mathematics 1, see the prerequisite to Mathematics 2.

** Summary of all lower division requirements for the commerce major

6 units in Applied Music (study of voice, or an instrument), of which at least 3 units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 50.)

Zoology

Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and 5.

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Subject Matter Requirements in the Upper Division

Psychology 1A (unless elected in lower division)-----	3	units
Political Science 101 or 113-----	2 or 3	units
Education-----	12	units
Minor (minimum in upper division courses)-----	6	units
Major-----	—	
Electives to make a grand total of 124 units.		

Explanation of upper division requirements listed above:

Political Science

History 171A-171B or History 173A-173B may be substituted to meet this requirement.

Education

A minimum of 12 units in education is required and a maximum of 18 units will be counted toward the degree. The courses in education for the minimum requirement must be chosen from the following list:

Ed. 1, Introductory Principles (lower division elective); Ed. 121, Principles of Secondary Education; Ed. 106, Philosophy of Education; Ed. 107, History of Education; Ed. 108, Educational Measurements; Ed. 109, Educational Administration and Supervision; Ed. 137, Comparative Education; Ed. 130, Educational Psychology; Ed. 140, Elementary Educational Statistics; Psychology 102, Genetic Psychology.

Major

The specific requirements in each major field are listed in the paragraphs immediately following.

Electives

These must be so chosen that, with the required subjects, a minimum of 40 units will be completed in upper division courses after the student has attained upper division standing. See, also, restrictions concerning the choice of applied and vocational courses, as explained on page 50.)

Major Requirements in the Various Fields

Art

Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150, 152A, 195, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses: English 4A-4B, 106A-106B, 117; French A-B; History 4A-4B, 111A-111B Speech Arts 55A-55B, 155A-155B.

Chemistry

A minimum of twenty upper division units in Chemistry including Chemistry 101-102. The choice of a related minor and the organization of the course of the major student must follow a definite plan approved by the department.

Commerce

Econ. 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, and 18 units additional chosen in one of the following groups:

- A. Accounting: Econ. 160A-160B, 161, 163, and 6 units in electives
 - B. Banking and Finance: Econ. 131, 133, 134, 135, and 6 units in electives.
 - C. Marketing and Merchandising: Econ. 123, 125, 171, and 9 units in electives.
- Geog. 141 may be used in the electives under A, B, C.

Economics

Required: Economics 100, 140 and 199, with 7 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171 and 199. Elective: 3 upper division units in general and applied economics. 6 additional upper division units in any combination of general and applied economics, and economic geography.

English

Forty-two units in English, of which six lower division units may be in journalism and speech arts and three upper division units may be in composition. At least eighteen units in upper division courses must be completed in the junior and senior years.

Foreign Languages

Group major: Eighteen upper division units in one language or twelve units in one language and six units in the other.

Geography

Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

History

Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must in his senior year, enroll in History 199, in connection with which he will write a paper, the subject matter to be arranged in consultation with the instructor.

Mathematics

Twenty-four units of upper division work in mathematics, or eighteen units in mathematics and six units in closely related subjects, arranged in consultation with the chairman of the department. Mathematics 111, 112, and 119 should be included in every major, except that students who have taken 14B need not take 119. Related courses offered by other departments include Statistical Methods (Economics 140), Mathematics in the Elementary School and in the Junior High School (Education 129 and 112) and certain upper division courses in chemistry and physics.

Music

Music 103A-103B, 105A-105B, 106A-106B, 107A-107B, 108, and 109 units of upper division elective courses in music. (See statement concerning Applied Music under lower division requirements.)

Zoology

(1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or 18 in the major subject and six in related courses in botany, organic chemistry, physics and physiology.

Lower Division Arrangements and the Junior Certificate

The State Board of Education has authorized fields in which majors and minors may be given in the California Teachers Colleges as follows: Agriculture, Art, Biological Science, Education, Commercial Education, English, Foreign Languages, Home Economics, Industrial Arts Education, Mathematics, Music, Physical Education, Physical Science, Philosophy, Psychology, Social Science.

Since the professional training of teachers requires the maintenance of the standard lower division courses in the field of letters and science, certain courses are available for students of this college who wish to make adaptations of their lower division curricula to correspond to the typical lower division preprofessional curricula. The completion of a curriculum will give junior standing upon transfer to a college offering upper division work in the appropriate field. Such available adaptations of freshman and sophomore courses offered by this college are: Prelegal, premedical, pre dental, social service, engineering, preagricultural, accountancy, secretarial training. Special advisers have been appointed for each of the above curricula, who will assist students at registration time in picking out programs so that they may qualify for the Junior Certificate. A list of these advisers is published in the Time Schedule each semester.

COURSES OF INSTRUCTION

Figures in parenthesis indicate the unit value of the course.

Courses numbered from 1 to 99 are lower division (freshman or sophomore) courses; those numbered 100 and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. First semester sophomores who have an average grade of not less than 2.0 grade point and second semester sophomores who have an average grade of not less than 1.5 grade points may enroll in an upper division course provided they were registered in at least 12 units in the preceding semester. It is understood that ordinarily the instructor will be consulted by sophomores wishing to take upper division courses. In such cases an upper division course will count as lower division credit.

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks.

The semester for offering courses is designated as follows: (1) Fall; (2) Spring; (3) Fall and Spring; (4) Year course, beginning either Fall or Spring; (5) Year course. Courses designated as "Year course" begin in the Fall, but those given in the list below may be taken in the reverse order (i.e., the second semester of the course may be taken before the first semester) or the second semester may be taken alone. In the case of other year courses, students who have completed the equivalent of the first semester's work may seek permission from the instructor to take the second half of the course. Single semester courses having the letter A as a part of the number (as for example, Art 61B) are not supposed to follow another course of the same number unless so indicated in the prerequisites to the course.

YEAR COURSES OPEN TO REGISTRATION IN THE MIDDLE OF THE YEAR

Economics 18A-18B	History 8A-8B
Economics 160A-160B	History 111A-111B
English 4A-4B	History 121A-121B
English 12A-12B	History 145A-145B
English 52A-52B	History 146A-146B
English 56A-56B	History 156A-156B
English 106A-106B	History 171A-171B
French 101A-101B	History 173A-173B
French 105A-105B	History 181A-181B
French 110A-110B	Music 2A-2B
Spanish 101A-101B	Music 103A-103B
Spanish 102A-102B	Music 110A-110B
Spanish 105A-105B	Political Science 1A-1B
Spanish 110A-110B	Speech Arts 55A-55B
History 4A-4B	Speech Arts 55C-55D
History 5A-5B	Speech Arts 155A-155B
	Speech Arts 156A-156B

Although the College fully expects to carry out the arrangements planned in the list of courses, it reserves the right to make changes.

AGRICULTURE

20. Nature Study.

SKILLING

A course to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades). May be credited as natural science only for students majoring in Education.

Fall and Spring (3).

ANTHROPOLOGY

LOWER DIVISION COURSES

50A-50B. Man's Evolutionary History.

ROGERS

Origin and antiquity of man. Classification of races. Origin and development of civilization. Prerequisite: Sophomore standing or special arrangement with instructor. Students wishing to take the second half of the course without the first half should consult the instructor.

Year course (3-3).

51A-51B. The American Indian.

ROGERS

Pre-Columbian cultures of the American Indian. Origin and migration of New World peoples. Prerequisite: Sophomore standing or special arrangement with instructor. Students wishing to take the second half of the course without the first half should consult the instructor.

Year course (3-3). (Not offered in 1933-1934.)

52. Primitive Cultures.

ROGERS

History and cultural development of primitive races of mankind. Particular consideration given to religion, arts and social organization of living primitive peoples.

Fall (3). (Subject to withdrawal in 1933-1934.)

53. Primitive Religious Culture.

ROGERS

Beliefs and ritual of primitive man. Magic and religion. Forms of animism and polytheism. Primitive mentality and the supernatural.

Spring (3). (Subject to withdrawal in 1933-1934.)

UPPER DIVISION COURSE

150A-150B. Social Anthropology.

ROGERS

Backgrounds of human society and contemporary problems in human biology and culture conflict considered from anthropological point of view. Students wishing to take the second half of the course without the first half should consult the instructor.

Year course (3-3). (Not offered in 1933-1934.)

ART

Lower division preparation for the presecondary major (in art) and for the junior certificate: Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Presecondary major (upper division): Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150, 152A, 195, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses: English 4A-4B, 106A-106B, 117; French A-B; History 4A-4B, 111A-111B; Speech Arts 55A-55B, 155A-155B.

LOWER DIVISION COURSES

Art Appreciation and History

5. Fundamentals.

JACKSON

An illustrated lecture course intended to increase appreciation and give a basic understanding of the elements and principles of art as expressed in the architecture, painting, sculpture, and crafts of the past and present.

Fall and Spring (2).

50. Appreciation and History.

JACKSON

A survey of the development of painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance, by means of illustrated lectures and discussion. (Not open to freshmen, except by special permission.)

Fall (3).

Design

6A. Structure.

BORSUM

Fundamentals of design and composition and theory of color. Basic course used as a prerequisite for all advanced art work.

Fall and Spring (2).

6B. Structure (continued).

BORSUM

Original work in creative design with special stress on modern tendencies. Prerequisite: Art 6A.

Fall and Spring (2).

11A. Industrial Design.

BORSUM

Problems in creating original designs for decorative and useful articles, jewelry, lamps, and objects that may be made in various materials by hand or machine process. Prerequisite: Art 6A-6B.

Fall (2). (Offered in even-numbered years.)

11B. Applied Design.

JACKSON, BORSUM

Designing and completion of actual objects by the students. Such processes involved as carving, painting, dyeing, block printing, batik and the like. Prerequisites: Art 6A-6B, 11A.

Spring (2). (Offered in odd-numbered years.)

14A. Lettering.

BORSUM

A study of fundamental art principles applied to lettering. Practice for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.

Fall (2).

14B. Posters and Commercial Art.

BORSUM

The application of lettering to posters, newspaper and magazine advertising, and other forms of commercial art. The study of composition combined with lettering and special study of modern tendencies in publicity. Prerequisite: Art 6A, 14A.

Spring (3).

52A. Stage Design.

Theory of line, color, and lighting in relation to the stage. Original sets and costumes developed on a miniature stage. Study of the development of the modern art of the theater. Upper division credit will be given in this course to students of junior standing upon the completion of extra theme work and additional original problems. Prerequisite: Art 6A.

Fall (3).

94. Costume Design.

BORSUM

Original problems in designing modern costumes. A study of line, color, texture, type, and suitability to the wearer and to the occasion; foreign and historic influence on dress. Prerequisite: Art 6A.

Fall (3). (Offered in odd-numbered years.)

Drawing and Painting

A-B. Freehand Drawing.

JACKSON

Semester I: Problems involving perspective to develop ability to draw still life, furniture, exteriors, interiors, and the like.

Semester II: Outdoor sketching of landscape and figure, and studio work from still life and costume pose. Emphasis on composition and technique in the handling of various mediums, pencil, pen and ink, charcoal, pastel, and water color.

Year course (2-2).

15A-15B. Life Drawing.*

JACKSON

Drawing from the nude model. Does not duplicate the former course in painting, numbered Art 15A-15B.

Year course, beginning either Fall or Spring (2-2).

6A-16B. Painting.

JACKSON

Semester I: Composition of still life and flower forms in water color.

Semester II: Landscape and more advanced composition in water color.

Prerequisite: Art A-B. No credit for students having completed Art 15A-15B, painting.

Year course, beginning either Fall or Spring (2-2).

* These courses may be taken in extension classes offered by the college, at the Fine Arts Gallery, Balboa Park. Instructor: Mr. Jackson.

Crafts

61A. Elementary Crafts.

Practical problems in elementary craft work, book binding, basketry, weaving, puppetry (including the dramatization and production of a puppet play), and demonstration of such processes as paper making, papier-mache, paper decoration through batik, and the like. Prerequisite: Art 6A when possible.

Fall and Spring (2).

61B. Elementary Crafts.

BOREN

Aimed to develop creative expression; to gain a certain ability to use simple tools, and some knowledge of suitable materials for elementary schools. The work covers toys in wood, tin, and the like; elementary clay modeling and pottery; demonstrations of cement mixing and of soldering and the adaptation of these processes to student-conducted activities. Prerequisite: Art 6A.

Fall and Spring (2).

62. Elementary Manual Training.

BOREN

Benchwork with hand tools suitable for children in the elementary school. This includes making of model airplanes, gliders, boats, simple furniture, and the like, stressing the freer type of manual arts. Prerequisites: Art 6A, 61B.

Fall and Spring (2).

UPPER DIVISION COURSES

Art Appreciation and History

150. Appreciation and History.

JACKSON

The period from the Renaissance through the Modern School, treated in the same manner as in Art 50.

Spring (3).

Design

112A-112B. Composition.

JACKSON

Imaginative composition of natural forms in black and white and color. Prerequisites: Art A-B, 6A-6B, and if possible 15A-15B.

Year course (3-3).

112C. Illustration.

JACKSON

Composition fulfilling the requirements of book illustration from poetry, imaginative tales, and legends, in black and white and color. Prerequisite: Art 112A.

Spring (3). (Offered in odd-numbered years.)

152A. Stage Design.

See Art 52.

152B. Stage Costume.

BORSUM

Costume studied in relation to drama. Original designs for mood and character. Practical problems in designing and decorating costumes and

accessories for college production. A brief history of costume from the Egyptian to the modern time. Prerequisites: Art 6A, 52A or 152A. Spring (3). (Offered in even-numbered years.)

152C. Stagecraft.

JONES

Stage terminology and technique. Scene building and decoration. Materials and their treatment for stage effects. Experience in setting and lighting college productions. Prerequisite: Art 52A or 152A. Spring (3).

195. Home Decoration.

House planning and landscaping. Interior decoration. Study of period styles and modern decoration. Illustrated lectures and original problems. Prerequisites: Art A, 6A. Spring (3).

Drawing and Painting

115A-115B. Life Drawing and Painting.*

JACKSON

Drawing and painting from nude and costume models. Year course, beginning either Fall or Spring (2-2).

115C-115D. Advanced Life.*

JACKSON

Painting from nude and costume models and advanced composition in oil. Portraiture. Prerequisites: Art 115A-115B. Year course, beginning either Fall or Spring (2-2).

116A-116B. Advanced Painting.

JACKSON

Painting in water color and oils from still life and landscape, stressing composition and technique. Prerequisite: Art 16A-16B. Year course, beginning either Fall or Spring (2-2).

ASTRONOMY

Lower division preparation in astronomy for advanced work and for the junior certificate: Astronomy 1, Plane Trigonometry, Mathematics A-3B, 4A-4B, Physics 2A-2B and 3A-3B, or 1A-1B and 1C-1D; a reading knowledge of French or German.

Descriptive Astronomy.

SKILLING

A cultural course planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature. Especial attention to the methods and instruments by means of which astronomical knowledge has been gained. A six-inch Alvin Clark telescope used for observation. Demonstrations given with a large spectrometer; also a good selection of lantern slides used to illustrate various topics. Prerequisite: Elementary Algebra and Plane Geometry. Fall and Spring (3).

Historic Development of Astronomy.

SKILLING

The leading facts now known in astronomy in the light of circumstances attending their discovery. Prerequisite: Astronomy 1. (3).

* These courses may be taken in extension classes offered by the college, at the Fine Arts Gallery, Balboa Park. Instructor: Mr. Jackson.

11. Modern Astronomy.

SKILLING

Stars and nebulae. Modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisites: Astronomy 1 and a knowledge of Physics.

(3).

BIOLOGICAL SCIENCES

(Biology, Botany, Zoology)

General students who wish to take only one or two courses in this department should register for Biology 10A-10B, 114A or 114B; (see below for prerequisites for each course).

Lower division preparation in botany for advanced work and for the junior certificate: Botany 2A, 2B, 4, 5, and Chemistry 1A.

Lower division preparation for the presecondary major in zoology and for the junior certificate: Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German Botany 2A, 2B, 4, and 5.

Presecondary major in zoology: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division course in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, physics, and physiology.

Students preparing to teach science in the junior high school should try to include in their courses work in zoology, botany, physics, chemistry (at least high school chemistry, and Education 120). The following are also desirable: geography, geology, anthropology, astronomy, and upper division biological sciences. See page 32.

Fees: A fee is required in all laboratory courses in this department (See page 23 for list of fees.) The fee covers the cost of materials used. For breakage and extra material in addition to the estimated need an extra charge must be made.

BIOLOGY

LOWER DIVISION COURSES

10A-10B. General

M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in human physiology and heredity. Laboratory work supplements the lectures and includes a study of living and preserved material. Aim of the course to acquaint the student with the basic facts of biology. Designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and one three-hour laboratory period per week. Designed for those who do not expect to specialize in zoology or botany, but not open for credit to students who have taken Zoology 1A, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1A or Botany 2A for credit.

Year course (3-3).

BOTANY

LOWER DIVISION COURSES

2A. General.

HARVEY

Fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week. Fall (4).

2B. General.

HARVEY

A continuation of 2A treating morphology and relationship of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Spring (4).

4. California Plants.

HARVEY

Classification and ecology of representative orders of flowering plants of the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week.

Spring (2). (Offered in even-numbered years.)

5. Trees and Chaparral.

HARVEY

Practice in the determination of the important species of the San Diego region. One lecture and three hours laboratory per week, with several Saturday field trips.

Spring (2). (Offered in odd-numbered years.)

7. Plant Physiology.

HARVEY

The functions of plants including metabolism, absorption, conduction, transpiration, respiration, growth and movement. One lecture and one three-hour laboratory period per week. Prerequisite: Biology 10A-10B or Botany 2A.

Fall (2). (Offered in even-numbered years.)

UPPER DIVISION COURSES

102. Plant Geography.

HARVEY

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or 4, or equivalent.

Fall (2). (Offered in odd-numbered years.)

104. Taxonomy.

HARVEY

Identification, classification, and distribution of representative orders of flowering plants. Six hours per week of lectures, laboratory, and field work. Prerequisite: Botany 2A-2B, 4.

Spring (3). (Offered in even-numbered years.)

106. Marine Plant Biology.

HARVEY

Marine algae of the San Diego region, including a study of structure, development, identification, and distribution. Collecting trips to the various beaches. One hour lecture and six hours laboratory per week. Prerequisite: A laboratory course in general biology or botany.

Spring (2 or 3). (Offered in odd-numbered years.)

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of lower division work in the department with a grade of A or B.

Fall and Spring (1 or 2).

ZOOLOGY

LOWER DIVISION COURSES

1A. General.

HARWOOD

An introduction to animal biology dealing with structure, functions, and evolution of animal life. Laboratory work supplementing the lectures and based on the study and observation of living and preserved material. Valuable to the general student as well as to the biology specialist, acquainting one with the fundamental facts and theories of biology as they pertain to animal life. Two lectures or recitations and two three-hour laboratory periods per week.

Fall (4).

1B. General.

HARWOOD

A continuation of 1A. The structure, relationships, and classification of the chordates. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A.

Spring (4).

UPPER DIVISION COURSES

100. Embryology.

M. E. JOHNSON

The development of vertebrates as illustrated by the frog, chick and pig. Six hours of laboratory and two hours of lecture per week. Prerequisite: Zoology 1B or Biology 10B.

Spring and Fall (4). (Offered in odd-numbered years.)

106. Comparative Anatomy of the Vertebrates.

CROUCH

Dissection, study, and comparison of organ systems of typical vertebrates. Two hours per week of lecture and six hours of laboratory. Prerequisite: Zoology 1B or Biology 10B.

Fall (4). (Offered in odd-numbered years.)

112. Marine Zoology.

M. E. JOHNSON

Designed to acquaint the student with the many interesting animals found along the beaches in the San Diego region. Identification, distribution, associations, structure, and to some extent, behavior and life histories of the organisms. Frequent collecting trips to the beach and study of the living animals in the laboratory. Prerequisite: A laboratory course in elementary Biology or Zoology.

Fall (3).

114A. Genetics.

HARWOOD

General introductory course designed to acquaint the student with the fundamental principles of heredity and variation. Special attention

given to the Mendelian interpretations of the facts of inheritance. Two lectures per week.

Fall (2).

114B. Evolution.

The development of theories of evolution. Two lectures per week.

Spring (2).

121. Entomology.

HARWOOD

The classification, life history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and six hours of laboratory per week.

Spring (4). (Offered in odd-numbered years.)

113A. Taxonomy and Natural History of the Vertebrates. HARWOOD

Frequent field trips and the identification of preserved material. One hour of lecture and six hours of laboratory per week. Prerequisite: Zoology 1B or Biology 10B.

Spring (3). (Offered in even-numbered years.)

113B. Ornithology.

CROUCH

The study and identification of birds, especially those of the Pacific coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1B, or Biology 10B.

Spring (3). (Offered in odd-numbered years.)

113C. Field Study of Birds.

CROUCH

The study and identification of the birds of the San Diego region. Three hours of laboratory or field work per week. Prerequisite: Zoology B or Biology 10B.

Spring (1).

99. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission only by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of work in the department with a grade of A or B.

Fall and Spring (1 or 2).

CHEMISTRY

Lower division preparation for the presecondary major in chemistry and for the junior certificate: Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-8, Physics 2A-2B and 3A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in Chemistry or to transfer to another college, and there work for a degree with a major in Chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Presecondary major (upper division): A minimum of twenty upper division units in Chemistry including Chemistry 101-102. The choice

of a related minor and the organization of the course of the major student must follow a definite plan approved by the department.

LOWER DIVISION COURSES

1A-1B. General Chemistry.

MESSNER, ROBINSON

The general principles and laws of chemistry, and a description of the elements and their compounds. Two lectures, one quiz and two laboratory periods per week. The laboratory work in the second semester consists of work in qualitative analysis. Prerequisites: At least two years of high school mathematics. Recommended: High school chemistry and physics.

Year course (5-5).

2A. Descriptive Chemistry.

ROBINSON

A one-semester lecture course designed for students who do not expect to do further work in chemistry but who desire an appreciation and understanding of the subject. The fundamental laws of chemistry, the constitution of matter, radioactivity, and a brief discussion of the field of organic chemistry, besides the customary description of the properties and uses of the more common chemical substances.

Fall and Spring (3).

6A-6B. Introductory Quantitative Analysis.

MESSNER

Determinations by gravimetric, volumetric, and electro-analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture, and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

7-8. Organic Chemistry.

ROBINSON

A general consideration of the carbon compounds (both aliphatic and aromatic) and their derivatives; their synthesis, constitution and properties, and the principles involved. Two lectures and one laboratory period per week first semester; one lecture and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

UPPER DIVISION COURSES

101-102. Advanced Inorganic Chemistry.

MESSNER

The laws and theories of elementary work from the viewpoint of physical chemistry. Laboratory work covering such topics as gas laws, mol weights, laws of combination, ionization, equilibrium relationships, and electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: Chemistry 1A-1B, 6A-6B, and Mathematics 7A-7B or equivalent.

Year course (4-4).

106A-106B. Quantitative Analysis.

MESSNER

An upper division course covering the same field as Chemistry 6A-6B but including some more advanced work. One lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

107-108. Organic Chemistry.

ROBINSON

An upper division course covering the same field as Chemistry 7-8 but including some more advanced work. Two lectures and one laboratory period per week first semester; two lectures and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.

Year course (3-4).

110. Industrial Chemistry.

ROBINSON

An introductory lecture course designed to acquaint the student with types of apparatus and unit processes of importance in the industry. A few typical industrial processes discussed in detail. Prerequisites: Chemistry 1A-1B and credit or registration in Chemistry 6A-6B and 7-8.

Spring (3).

112. Industrial Analysis.

ROBINSON

A laboratory course including the analysis of fuels, petroleum products, water, and gas. Prerequisite: Chemistry 6A-6B.

Spring (2).

114. Biochemistry.

MESSNER

An introductory lecture course covering the carbohydrates, proteins, fats and the changes which they undergo in digestion and metabolism, as well as a consideration of the vitamins and other accessory food factors and their importance to the body. A brief discussion of the chemistry of plant life. Prerequisites: Chemistry 1A-1B and 7-8.

Spring (3).

113-124. Organic Preparations.

ROBINSON

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. Laboratory and conferences. Prerequisite: Chemistry 7-8. A reading knowledge of German recommended.

Year course, beginning either Fall or Spring (2 to 5-2 to 5).

115. History of Chemistry.

ROBINSON

Development of the science of chemistry from the time of the alchemists to the present. Conducted on the reading, report, and seminar basis. Prerequisite: Chemistry 101-102.

Fall and Spring (2).

119. Special Topics.

INSTRUCTORS OF THE DEPARTMENT

Supervised individual work in specialized branches of chemistry such as colloid chemistry, biochemistry, applications of the phase rule, etc. Admission only by the consent of the instructor. Hours and credit to be arranged in each case. Open only to upper division students who have shown their ability to do A or B work in chemistry.

Fall and Spring (1-3).

ECONOMICS

Lower division preparation for the presecondary major in economics and for the junior certificate: Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B; History 8A-8B; Psychology 1A, 4A; Geography 1 and 2. Recommended: Social Science 50; Economics 14A-14B, 18A-18B.

Presecondary major (upper division) in economics, required: Economics 100, 140 and 199, with 7 units selected from the following Economics 121, 123, 127, 131, 133, 134, 135, 171, and 194. Electives Three upper division units in general and applied economics; 6 additional upper division units in any combination of general and applied economics, and economic geography.

Lower division preparation for the presecondary major in commerce and for the junior certificate: Economics 1A-1B, 11, 14A-14B (6 units) English 1A-1B; Geography 1-2; Mathematics* 1 and 2; History 4A-4B or 8A-8B or Political Science 1A-1B.

Presecondary major (upper division) in commerce, required: Economics 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, and 18 units additional chosen in one of the following groups:

A. Accounting: Economics 160A-160B, 161, 162, and 6 units in electives.

B. Banking and Finance: Economics 131, 133, 134, 135, and 6 units in electives.

C. Marketing and Merchandising: Economics 123, 125, 171, and units in electives.

Geography 141 may be used in the electives under A, B, C.

LOWER DIVISION COURSES

1A-1B. Principles of Economics.

CAMERO

The basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wage and profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs; transportation corporations, labor problems, socialism, taxation etc. Aims of the course: (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and (3) to introduce future citizens to political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Year course (3-3).

11. Economic History of the United States.

WRIGHT

A comprehensive survey of American economic development and national legislation in the field of industry.

Fall (3).

14A-14B. Accounting.

WRIGHT

A knowledge of bookkeeping not required and not advantageous. T balance sheet; profit and loss statement; various types of books; original entry; the opening, conducting, and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions, and co

* For the equivalent of Mathematics 1, see the prerequisite to Mathematics 2.

solidations; branch stores accounting, etc., keeping in view the best modern accounting practice. Five hours lecture and laboratory.

Year course (3 or 4-3 or 4).

18A-18B. Commercial Law.

STANTON

The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions, rather than the development of those principles. The subjects covered: contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance, and wills, with a brief study of evidence.

Year course (3-3).

UPPER DIVISION COURSES

100. Modern Economic Thought.

A. G. PETERSON

Classical doctrine in the light of recent economic theory. A critical analysis of contemporary economic thought. Prerequisite: Economics 1A-1B.

Spring (3).

121. Business Administration.

A. G. PETERSON

Problems of business administration as an interrelated whole and as an indication of lines of study which may lead to the solution of those problems. A discussion of the problems of the business administrator with particular reference to the character of the problems involved and to the control policies and devices of the manager. Questions, problems, and case studies. Prerequisite: Economics 1A-1B.

Fall (3).

123. Marketing.

CAMERON

Our distributive organization and its functions, including the marketing of both agricultural and manufactured products. Prerequisite: Economics 1A-1B.

Spring (3).

125A. Advertising.

SHORE

Functions, theory, principles and applications; selecting the right appeal; surveys and analyses; studying markets; budgeting the appropriation; layouts, type, borders and illustrations; use of color; choice of mediums; writing publicity and promotion stories; openings, anniversaries, sales and special events; institutional copy; the advertising agency and its functions; sales and collection letters.

Fall (2). (Not offered in 1933-1934.)

125B. Salesmanship.

MITCHELL

Salesmanship, the market basket of knowledge; the mechanics of the mind; overcoming fear; the human element in selling; meeting competition; analyzing a sale in advance and methods of using this analysis in consummating a sale; personal attributes; selling an invisible commodity; selling a specialty; retail selling; the steps of a sale. Actual merchandise will be used in demonstration. Outstanding salesmen in the various crafts will illustrate correct methods of selling.

Spring (2). (Not offered in 1933-1934.)

127. Urban Land Economics.

CAMERON

The development of urban economy, location and structure of cities urban land utilization, city planning and zoning, taxation, housing, urban land credit and land valuation, with special emphasis upon local conditions. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1933-1934.)

131. Public Finance.

Principles and practice of taxation, public expenditures, and financial administration. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1933-1934.)

133. Corporation Finance.

CAMERON

The corporate form of organization, instruments of long-time finance, methods of raising capital, efficient financial management, and the financing of reorganizations. Prerequisite: Economics 1A-1B.

Fall (3).

134. Investments.

CAMERON

Investment analysis and the investment of personal savings.

Spring (3).

135. Money and Banking.

CAMERON

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A-1B.

Fall (3).

140. Statistical Methods.

BROOM

The nature and uses of statistical method in the social sciences. Practice in the tabular and graphical presentation of data; in the computation of averages, ratios and coefficients, measures of dispersion, and measures of relationship. Research studies are made, utilizing data obtained from typical economic and commercial situations, involving index numbers, time series, and business cycles and barometers. Opportunity to obtain practice in the use of calculating machines and other aids to computation. Prerequisite: Mathematics B and C, or equivalents, or Mathematics I. Only two units of credit are available for this course in the case of students who previously have completed Education 140.

Spring (3).

151. Personnel Administration.

A. G. PETERSON

Principles of scientific management, labor turnover, selection and placement of personnel, discipline and discharge, methods of wage payment, health and safety, labor participation in management. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1933-1934.)

160A-160B. Advanced Accounting.

WRIGHT

An intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory

accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory. Prerequisite: Economics 14A-14B.

Year course (3-3). (Not offered in 1933-1934.)

161. Cost Accounting.

WRIGHT

Principles and methods of cost accounting in the mercantile establishment and in the factory. A study of bookkeeping procedure, the forms used, and their application to practical problems. Prerequisite: Economics 14A-14B.

Spring (3).

162. Accounting Systems.

WRIGHT

The accounting systems used in various types of business and financial concerns. Some practice in devising and installing systems. Prerequisite: Economics 14A-14B.

Spring (3). (Not offered in 1933-1934.)

163. Machine Accounting.

WRIGHT

The application of mechanical accounting devices to accounting conditions together with a study of efficient machine methods that conform to good accounting practice and yet meet the practical accounting requirements that are found in many classes of business. In addition to a thorough study of machine installations, the course requires considerable practice in the operation of standard accounting machinery. Prerequisite: Economics 14A-14B.

Fall (3).

71. Transportation.

CAMERON

The development of railway transportation; railroad financing; rates and rate making; government regulation; government operation of railroads during the war; recent development of motor and air transportation; current problems. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1933-1934.)

94. International Economic Relations.

A. G. PETERSON

A brief treatment of certain geographical, sociological, and legal phases of international relations followed by a study of the commercial and industrial basis of world economy touching upon a number of special problems involved and supplemented by an introductory study of materials covering the processes, principles, and policies of international trade.

The course concerns itself primarily with the economic basis of international relations, but political aspects are almost constantly taken into account in recognition of the fact that international relations are frequently political in form but economic in content.

Spring (3).

99. Special Study.

THE STAFF

Designed exclusively for seniors with a major in economics or commerce.

Spring (2).

Economic Geography

(See Geography)

Social Economics

LOWER DIVISION COURSES

10. Introduction to Social Science.

A. G. PETERSON

An introduction to college objectives and college problems followed by a study of man's descent, race, social organizations, ideals of conduct, and civilization. Modern problems. Required of all freshmen who are candidates for a degree in teacher training.

Fall and Spring (3).

50. General Sociology.

KELLY

A study of the nature and organization of human group activity, including the relation of cultural heritage to public opinion and social change. Previous preparation in biology and psychology recommended.

Fall and Spring (3).

Social Psychology

(See Psychology)

Secretarial Training

A. Business Mathematics.

WRIGHT

A practical course in the mathematics of business. Development of the ability to add, subtract, and divide rapidly and accurately. A thorough study of interest, compound interest, discount, amortization tables, insurance rates, etc.

Fall (1).

1A-1B. Typewriting.

AMSDEN

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of type-written material with special reference to commercial forms, tabulation and billing; specifications, legal forms, and preparation of manuscripts; transcription, mimeographing, etc. Ordinarily no credit given for this course except in the curricula in accountancy and secretarial training. Ten hours lecture and laboratory practice.

Year course (3-3).

2A. Typewriting.

AMSDEN

A short course designed for those not wishing to enter the business office but desiring a knowledge of the use of the typewriter. Five hours laboratory practice.

Spring (2).

3A. Office Methods and Appliances.

WRIGHT

Practice and principles of office management, including organization, arrangement, and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and book-keeping machines. Trips made to local establishments to study at first

hand actual business conditions. Prerequisite: Secretarial Training 1A or its equivalent.
° Spring (3).

5A-5B. Stenography.

AMSDEN

An intensive course designed for the practical preparation of office secretaries. A thorough study of the Gregg System. Development of the ability to read and write shorthand rapidly and correctly, both literary and commercial. The shorthand speed necessary to pass a civil service examination is attained by the end of the year. Ordinarily no credit given for this course except in the curricula in accountancy and secretarial training.

Year course (5-5).

6A. Advanced Stenography.

AMSDEN

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary material.

Fall (3).

EDUCATION

LOWER DIVISION COURSES

1. Education—Introductory Principles.

BACON, DEPUTY

An orientation course in professional education. A preliminary survey covering briefly the historical and philosophical background of the modern public school and culminating in a consideration of modern educational practice, with special reference to public and quasi public organizations which more or less directly participate in the program of education.

Fall and Spring (3).

7. Music in the Elementary School.

L. D. SMITH

Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing, and part singing. Conducting. Prerequisite: Music 1A, or the equivalent.

Fall and Spring (2).

8. Art in the Elementary School.

BORSUM

Discussion of the elements and principles of art and their place in the self-expression and appreciation of the elementary school child. Lectures illustrated with examples of children's work and opportunity given for experience with mediums used in elementary school problems. Prerequisite: Art 6A.

Fall and Spring (2).

UPPER DIVISION COURSES

9. Philosophy of Education.

AULT

The fundamental biological, psychological, philosophical, social principles underlying modern education, in connection with the demands of modern society in a complex social, economic, and scientific world, with a view to the formulation of a working philosophy for the educative process.

Designed as a culmination of the studies of education and its procedures. Open only to students with senior standing.

Spring (3).

107. History of Education.

AULT

A brief study of early Hebrew, Greek, Roman and early Christian education; of the changes brought about by the Renaissance; of the transition to modern secular education; brief reviews of the educational philosophies of the great reformers; a concluding study of the development of the American school system and of American ideals and practices in education. Only 2 units allowed for students having credit for Education S107. History of Education in the United States (offered in the summer session).

Fall (3).

108. Educational Measurements.

BROOM

A brief survey of the development of scientific measurement in the elementary school field, including an intensive study of the more reliable and valid tests of school achievement and of mental ability. Statistical training given in handling data obtained by using measurements in typical school situations, leading to a study of the uses of tests. Practice in the construction of teacher-made, objective tests in the elementary school subjects. Open only to students who have passed the Fundamentals Test.

Fall and Spring (3).

109. Educational Administration and Supervision.

BROOM, HARDY

A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc. Prerequisites: Education 125B, 108 or equivalents.

Spring (2).

110. Educational Organization and Supervision.

BROOM

Types of supervision and methods of evaluating and improving teaching. Prerequisites: Education 125B, 108 or equivalents.

(2)

111. English in the Junior High School.

F. L. SMITH

Objectives of literature and language teaching in the junior high school; criteria for selection of material; technique of classroom procedure; observation in the city schools. Prerequisite: The satisfaction of the lower division requirements in English for the teaching major in English.

Spring (2).

112. Mathematics in the Junior High School.

RICHARDS

The subject matter, management of it, and methods of teaching it in a junior high school curriculum in general mathematics. Specific problems: the application of arithmetic in current social and business life, intuitive geometry, graphic representation, the phase of algebra suitable to the junior high school pupil, preparation for senior high school mathematics. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

(2)

114. Social Science in the Junior High School.

NIDA

The teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography, and civics. Methods of developing a genuine and continuing interest in social and civic problems through observation and reading, discussed and illustrated. Special stress on evaluating historical and geographical material for educative purposes on this level. Prerequisites: Four units of geography and six units of history.

Fall (2).

116. Practice Teaching.

AULT AND SUPERVISORS

Systematic observation, participation, and actual teaching under competent supervision in the Training School and in the city schools of San Diego. The general plan for a student who has not had teaching experience is to take one period of practice teaching daily for a semester and two periods daily for another. In some cases the second assignment is for a half day. Only in case of an extreme emergency will a student who has not had experience in teaching be permitted to satisfy all practice teaching requirements in a single semester. It is planned to distribute the practice teaching assignments so that the student will have some experience in both upper and lower grades, with the emphasis on the grade or grades in which the student is particularly interested. Deviation from this plan is very liable to result in unsatisfactory training and is tolerated only when unavoidable.

One period of teaching daily for a semester is usually credited with two or three units and two periods with four to six units, depending upon the character of the assignment and the work. When more time is needed the student is assigned to additional practice.

Practice teaching requirements may be reduced for those who present evidence of successful public school experience. The maximum amount of credit allowed for this course is twelve units. Practice teaching credit is usually reduced to four units by the universities. Students planning to transfer to such institutions should be prepared to meet this reduction with an equal amount of acceptable units in other subjects. No grade below a C is acceptable for credit in this course.

Prerequisites: Passing grade in Fundamentals Test and completion of 75 units of college work; C average in all college work and in work of the preceding semester; three units of credit in Psychology and six units of credit in Education. No credit will be given for this course unless registration is made in the office of the Dean of Education.

119. Art in the Junior High School.

Art curriculum planning for junior high schools and studio problems and discussion. Prerequisite: Education 19.

Spring (2).

20A. Biological Sciences in the Junior High School. M. E. JOHNSON

The content, methods, field work, textbooks, laboratory work, equipment, and reference reading for junior high school biological sciences. Prerequisite: Eighteen units of college science including Biology 10A-10B or Zoology 1A-1B and Botany 2A-2B.

Fall (2).

120B. Physical Sciences in the Junior High School.

SKILLING

The content, methods, field work, textbooks, laboratory work, equipment, and reference reading for junior high school physical sciences. Prerequisite: Eighteen units of college science including Physics 2A-2B or equivalent and high school or college chemistry.

Spring (2).

121. Principles of Secondary Education.

NIDA

The principles of educational science that should underlie the organization, administration and curriculum of the secondary school. Prevailing patterns of high school education; tendencies in the direction of future development. Particular attention to the method of directing learning in the secondary schools. Prerequisites: Psychology 1A and Education 1, or equivalents. Open only to students with senior standing.

Fall and Spring (3).

124. Romance Languages in the Junior High School.

PHILLIPS

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value. Prerequisite: Two years of college French or Spanish.

Spring (2).

125A. Curricular Activities—Lower Levels.

HAMMACK

Units of work: characteristics of children in the primary grades; organization of the activity program, activities and materials based on children's interests and need through the local environment; teaching and learning procedures for acquiring basic abilities, reading, language, writing, use of numbers; observation and participation in actual classroom situations. No credit for those who have had Education 128.

Candidates for the Elementary Credential are required to take both Education 125A and 125B, preferably in the order listed. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (3).

125B. Curricular Activities—Upper Levels.

SMOOR

Units of work: characteristics of children in middle and upper grades; organization of the program in terms of children's interests and capacities; techniques of developing abilities in reading, use of numbers and language expression; investigations of methods and materials of the basic studies; observation of typical teaching procedures. No credit for those who have had Education 104. See note under Education 125A concerning these two courses. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (3).

126. Children's Literature.

CORBETT

The principles of selection underlying the choice of literature for the elementary school, with special emphasis on the social and educational status of the child. Source material and its classification. A critical examination and evaluation of new literary materials for children's use

and a discussion of the best illustrators of books for children. Practice in developing technique in story telling through practical work in Story Hours.

Fall and Spring (2).

127. Music in the Secondary School.

L. D. SMITH

Main objectives of music teaching in the public secondary schools. Organization of the chorus and glee clubs, voice testing, seating, a survey of song materials available. Organization of courses in applied music, harmony, history and appreciation. Prerequisite: Education 17.

Fall (2).

129. Mathematics in the Elementary School.

RICHARDS

A discussion of the applications of psychology and experimental education to the teaching of arithmetic and elementary general mathematics, together with study and observation of the newer methods as used under ordinary classroom conditions. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

Fall and Spring (2).

130. Educational Psychology.

BROOM

Man's equipment for learning and the learning process. Consideration given to human behavior which is fundamental to learning. The study of learning includes such topics as laws of learning, improvements in learning, remembering and forgetting, fatigue in learning, and the transfer of training. Prerequisite: Psychology 1A.

Spring (3).

137. Comparative Education.

AULT

School systems of England, France, Germany, and Denmark; traits of peoples; origin and development of school systems; literacy of populations; traditional influences; characteristic types of schools and educational procedures; governmental and private support; training of teachers.

An upper division course open only to students who have had Education 1. A knowledge of History of Education desirable but not required.

Fall (3).

140. Elementary Educational Statistics.

BROOM

An introductory study of measures of central tendency, of variability, and of relationship which are commonly used in connection with educational work. Laboratory training in statistical method and opportunity to obtain practice in the use of calculating machines and other aids to computation. Data for statistical research taken from typical school situations. Only 2 units allowed students who have taken Economics 140.

Fall (3).

145. Organization and Administration of Music Education.

L. D. SMITH

Theory of the general principles of music administration; correlation of music with the various subjects in the public schools; music tests; creative work. Prerequisite: Education 17.

Fall (2). (Offered in even-numbered years.)

160. Vocational Education.

WRIGHT

Aims and objectives of vocational education of less than college grade. Spring (3). (Not offered in 1933-1934.)

161. Junior Business Training.

WRIGHT

The methods and content of the course in the elements of business training as offered in the junior high school. Not open for credit for those who have taken Secretarial Training 3A.

Spring (2).

163. Stenography.

AMSDEN

Methods and content of courses in stenography. Prerequisite: Secretarial Training 5A.

Fall (2).

164. Bookkeeping.

WRIGHT

Various types of bookkeeping method, with considerable study of content.

Fall (2).

165. Typewriting.

AMSDEN

Methods in typewriting and office procedure. Prerequisite: Secretarial Training 1A.

Spring (2).

170. Visual Aids in Education.

EVANS

Psychological principles underlying the use of visual aids in education; the sphere of the visual method; materials classified as visual aids; guiding principles in the selection of pictures and methods of using visual aids. Practical laboratory experience in the work of a supervisor in selecting, organizing, distributing, and evaluating visual aids and in demonstrations to teachers; the care and operation of projectors and photographic laboratory equipment.

This course is given at the visual education center of the San Diego city schools and the enrollment is limited to students who have made previous arrangements with the head of the education department and with the instructor.

Fall and Spring (2).

199. Educational Problems.

EDUCATION STAFF

(Dean of Education in Charge)

A course for senior students in teacher training who have shown ability to work independently on educational problems. Admission only by consent of the staff. Credit and hours to be arranged.

Fall and Spring (1-3).

ENGLISH

Lower division preparation for the presecondary major in English and for the junior certificate: English 1A-1B and nine units from 12A-12B, 56A-56B, 52A-52B. Recommended: A reading knowledge of German or French.

Presecondary major (upper division)—Required: Forty-two units in English, of which six lower division units may be in journalism and speech arts and three upper division units may be in composition. At least eighteen units in upper division courses must be completed in the junior and senior years.

LOWER DIVISION COURSES

1A-1B. Composition.

ADAMS, KEENEY, PFAFF, ROGERS, F. L. SMITH, F. D. WALKER

1A. A course in writing directed to a mastery of technical correctness and a training in the organization of material. 1B. Practice in effective writing based on extensive reading of modern literature.

A classification test in Subject A must be taken before admission.

Year course, beginning Fall and Spring (3-3).

4A-4B. Great Books.

OUTCALT

A survey of books and bodies of literature that are significant sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic and Tragedy, Norse Eddas, and other literature of religious and communal character; and highly significant masterpieces in poetry and prose by great authors down to the nineteenth century.

Year course (3-3).

10. Recreational Reading.

F. L. SMITH

Development of personal tastes for leisure time reading through lectures and oral or written reports. May be taken a second time with new material.

Fall and Spring (1).

12A-12B. Modern Prose: Nonfiction.

F. D. WALKER

Semester I: Studies in scientific, social, and cultural thought in England and in America since 1850. Reading from selected books by such representative authors as Darwin, Huxley, Carlyle, Newman, Henry Adams, Mark Twain, Walter Lippmann. Discussions and reports. Semester II: A survey of the trends in recent biography based upon reading in nineteenth and twentieth centuries. Lectures, discussions, and reports.

Year course (3-3).

2A-52B. Types of Literature.

OUTCALT

Semester I: Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems. Semester II: Introduction to the study of dramatic poetry and prose, the essay, novel and short story; elements, principles and characteristics; examples.

Year course (3-3).

5A-56B. Survey of English Literature.

KEENEY, ADAMS

The most important masterpieces of English literature from the Anglo-Saxon period through the Victorian age.

Year course (3-3).

UPPER DIVISION COURSES

101. Modern Prose Fiction.

F. L. SMITH

Recent and contemporary fiction in novel and short story, beginning with Meredith and including the best British and American fiction of today.

Spring (3).

106A-106B. Advanced Composition.

F. L. SMITH

A laboratory course in modern prose writing. Semester I: Artistic narrative, with description. The short story. Semester II: The essay, the magazine article, criticism. Outside readings. Prerequisite: One year of college composition.

Year course (3-3). (Either semester may be taken first.)

116. Elizabethan Literature.

ADAMS

An introduction to the principal writers from Wyatt and More to Jonson and Bacon. Approximately equal attention is given to the non-dramatic poetry, the prose, and the drama of the period.

Spring (3).

117. Shakespeare.

OUTCALT

Extensive reading of Shakespeare's plays, with special attention to a select group of the comedies and another of the tragedies. Lectures and special reports.

Fall (3).

118. Makers of Eighteenth Century Literature.

KEENEY

Pope, Defoe, Swift, Johnson, Goldsmith, Fielding, and their contemporaries as interpreters and teachers of their age.

Spring (3).

119. The Romantic Poets.

ADAMS

A study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

Fall (3).

121. Poetry of the Victorian Period.

F. D. WALKER

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

Spring (3).

130. Recent American Literature.

OUTCALT

A survey of American literature with its backgrounds from the Civil War to the present time. Extensive reading in recent poetry, fiction, etc. Lectures, discussion, and reports.

Spring (3).

143. The Development of the English Novel.

F. D. WALKER

History of the English novel from the beginnings to Hardy. Extensive reading of novels with reports. Lectures and discussion.

Fall (3).

51. Medieval Literature.

KEENEY

The literature of the fourteenth century, especially the verse romances and the poetry of Chaucer.

Fall (3).

60. Milton and Dryden.

ADAMS

Studies in the poetry of the seventeenth century, relating it to the thought and the social life of the age.

Spring (3).

JOURNALISM

(See page 90.)

SPEECH ARTS

(See page 107.)

FOREIGN LANGUAGES

Lower division preparation for advanced work in a foreign language and for the junior certificate: Sixteen units of credit in the language chosen for the major. Recommended: History 4A-4B, Geography 118.

Lower division preparation for the presecondary group major in the Romanic languages: French A-B, C-D, and Spanish A-B, C-D.

The group major requirements are based on the assumption that the student will have taken courses in the high school equivalent to the college course in elementary French or Spanish. A student who offers matriculation credit for only two years of the high school course in a Romanic language may take a placement test to determine his eligibility for the third semester of the college course.

Presecondary group major (upper division). Eighteen upper division units in one language or twelve units in one language and six units in the other, taken in the junior and senior years.

French

LOWER DIVISION COURSES

B. Elementary.

E. M. BROWN, CRAMER, PHILLIPS

Intensive study of French grammar and syntax; daily written work discussed in class; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of French prosody, with memory work. Credit not given for French A unless followed by French B.

Students who have had one year of French in high school should register for French A, but will receive only two units of credit. Those who have had two years of French in high school should register for French B, in which case they will receive four units of credit.

Year course (5-5).

C. Intermediate.

E. M. BROWN, L. P. BROWN

Reading and composition; study of standard prose as a basis for class work; collateral reading with resumés and written reports in French;

study of French prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences. Prerequisite: French B or three years of high school French, or its equivalent. Students with credit for four years of high school French, or its equivalent, should enter French D.

Year course (3-3).

SC. Scientific.

CRAME

Readings taken from the fields of chemistry, physics, medicine, zoology, biology, etc. Outside readings of books and periodicals. Oral and written reports.

Fall (2).

UPPER DIVISION COURSES

101A-101B. Conversation and Composition.

E. M. BROW

Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1933-1934.)

105A-105B. Modern French Drama.

E. M. BROW

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, He vieux, Maeterlinck, Rostand, and others read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3).

110A-110B. Modern French Novel.

E. M. BROW

A study of the French novel from Victor Hugo to the present day, including such authors as: Hugo, Dumas, Stendhal, Balzac, Flaubert, Loti, Anatole France, Bourget, Bordeaux, Bazin, Barres, Romain Rolland, A Gide, Marcel Proust, and others. Class and outside reading and reports. Prerequisite: French D or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1933-1934.)

German

LOWER DIVISION COURSES

A-B. Elementary.

CRAMER, H. K. WALKER

Pronunciation, reading and grammar, with practice in simple conversation, narration and description, both oral and written. Credit not given for German A unless followed by German B. Students who have had one year of German in high school should register for German A but will receive only two units of credit. Those who have had two years of German in high school should register for German B, in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

CRAME

Reading and composition; study of standard prose as basis for class work; collateral reading with written reports; German conversation with the texts read as a basis; dictation. Prerequisite: German B or three years high school German, or its equivalent. Students with credit

for four years high school German, or its equivalent, should enter German D.

Year course (3-3).

SC-SD. Scientific.

CRAMER

Fall semester. Readings in scientific reader on chemistry, physics, etc.; occasional written reports on scientific subjects read outside of class; sight reading. Spring semester. Readings in special scientific or technical works; weekly written reports required; sight reading. Prerequisite: German SC-German B with a grade of C or three years of high school German; German SD-German C with a grade of C or four years of high school German.

Year course (2-2).

Spanish

LOWER DIVISION COURSES

A-B. Elementary.

L. P. BROWN, PHILLIPS

Intensive study of Spanish grammar and syntax, with daily written work; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of Spanish prosody, with memory work. Credit not given for Spanish A unless followed by Spanish B. Students who have had one year of Spanish in high school should register for Spanish A, but will receive only two units of credit. Those who have had two years of Spanish in high school should register for Spanish B, in which case they will receive four units of credit.

Year course, beginning either Fall or Spring (5-5).

D. Intermediate.

PHILLIPS

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; a study of Spanish prosody, with selections for memorizing; dictation. Class work conducted mainly in Spanish. Individual conferences. Prerequisite: Spanish B or three years of high school Spanish, or its equivalent. Students with credit for four years of high school Spanish, or its equivalent, should enter Spanish D.

Year course (3-3).

UPPER DIVISION COURSES

A-101B. Conversation and Composition.

L. P. BROWN

Prerequisite: Spanish D, or its equivalent, with grade of C.

Year course (3-3). (Not offered in 1933-1934.)

A-102B. Introduction to Spanish Classics.

L. P. BROWN

Reading from several types of classical literature. Lazarillo de Tormes, other novels of Roguery; one drama each from the works of Lope Vega, Calderon, Alarcon, and Moreto; selections from Don Quixote, the Cien Mejores Poesias Castellanas; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor. Year course (3-3). (Not offered in 1933-1934.)

105A-105B. Modern Spanish Drama.

L. P. BROWN

The development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Not offered in 1933-1934.)

110A-110B. Novel and Short Story in Spain.

L. P. BROWN

The development of the novel and short story in Spain from 1830 to the present time: Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3).

General Language

LOWER DIVISION COURSE

A. Latin and Greek Word Derivation.

L. P. BROWN

A general and elementary course in philology. Latin and Greek roots of most frequent occurrence in English. Interrelations and development of meaning of the different words in English derived from the given roots. Not open to freshmen.

Spring (2).

GEOGRAPHY

Lower division preparation for the presecondary major in geography and for the junior certificate; Geography 1, 2, 3, and Geology 1A-1B. Recommended: A reading knowledge of French or German.

Presecondary major (upper division): Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

LOWER DIVISION COURSES

1. Introduction to Geography; Elements.

BROOKS, CLARK, SUH

The fundamental principles of geography, the distribution of life upon the earth, and the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources, and location in their relation to human activities. Open to all students.

Fall and Spring (3).

2. Introduction; Natural Regions and the Distribution of Population and of Cultures.

CLARK, SUH

The application of the fundamental principles of geography to the various regions of the world. Comparison of regions with regard to different stages of development. Prerequisite: Geography 1.

Fall and Spring (3).

3. Elementary Meteorology.

BLAK

An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments, and records.

Fall and Spring (3).

UPPER DIVISION COURSES

113. Climatology.

BLAKE

A survey of the different climates of the world and their effect upon vegetation and human activities. Special attention given to the climate of different parts of the United States. Prerequisite: Geography 3.

Spring (3). (Not offered in 1933-1934.)

116. Geography of South America.

CLARK

The climate, topography, and natural resources of the South American countries; the effect of those physical factors upon the economic, commercial, and racial problems of the different nations. Prerequisite: Geography 1.

Spring (3).

117. Geography of Northwestern Europe.

CLARK

The physical environment of each of the nations of the area and their reactions to physical environment in their political and social relations. Importance of the countries in manufactures. This course is planned so to familiarize the student with modern European countries that he can read current periodical literature with understanding and interest. Prerequisite: Geography 1.

Fall (3).

118. Geography of the Mediterranean Area.

CLARK

A treatment of Southern Europe, Western Asia, and Northern Africa as a unit and a comparison of the land forms, climates, types of native vegetation, cultivated crops, industrial status, and present world position; also the effect of geographic factors on the history of the area. Prerequisite: Geography 1.

Spring (3).

121. Geography of North America.

SUHL

The natural regions of North America, their formation and economic and historical development. Prerequisite: Geography 1.

Fall (3).

124. Geography of Asia.

SUHL

The cultural regions of Asia, their physical environment, and historical development. Prerequisite: Geography 1.

Spring (3).

135A. Geography of the San Diego Area: Rural.

CLARK

Directed field work within the county designed to familiarize prospective teachers with the local area or field work and mapping of a small area and its geographic interpretation. Prerequisite: Geography 1 and 2.

Spring (2).

35B. Geography of the San Diego Area: Urban.

SUHL

Directed field work within the city designed to aid in teaching this region or directed field work in the analysis of urban evolution. Prerequisite: Geography 1 and 2.

Fall (2).

141. Economic Geography.

SUHI

A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisite: Geography 1 and 2.

Fall (3).

GEOLOGY

LOWER DIVISION COURSES

1A. General.

BROOKS

Materials of the earth; their composition, distribution, and modification through processes both mechanical and chemical, operating upon and within the earth, with the production of varied surface conditions. Three lectures and one two-hour laboratory period weekly.

Fall and Spring (3).

1B. Historical.

BROOKS

Geological history of the earth from time of probable origin to the present as interpreted through lithologic and paleontologic sequence, with especial attention to North America as illustrative of earth chronology. Three lectures and one two-hour laboratory period weekly. Prerequisite: Geology 1A.

Spring (3).

UPPER DIVISION COURSES

100. Physical Geology.

BROOKS

The evolution and description of structural and topographic features of the earth. Lectures, discussions, and problems. Prerequisite: Geology 1A.

Fall (3).

101. Geologic Problems.

BROOKS

Directed reading from a prepared syllabus introducing the several phases of geologic literature: or geologic reconnaissance of adjacent areas with elementary mapping: or selection and preparation of materials for the departmental collections. Prerequisite: Geology 1A.

1B. Registration subject to approval of instructor.

Spring (1-4).

GERMAN

(See Foreign Languages)

HEALTH AND PHYSICAL EDUCATION

(See Physical Education)

HISTORY

Lower division preparation for the presecondary major in history and for the junior certificate: History 4A-4B, 5A-5B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one of the three history

courses at a time. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B or 5A-5B.

Presecondary major (upper division): Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. In addition, the student must, in his senior year, enroll in History 199, in connection with which he will write a paper, the subject matter to be arranged in consultation with the instructor.

LOWER DIVISION COURSES

4A-4B. History of Modern Europe.

LESLEY

Development of European society and institutions from about 1500 A.D. to the present time.

Year course (3-3).

5A-5B. History of England.

NASATIR

The more important political, constitutional, and cultural phases of English development. The purpose of this course is to convey a good working knowledge of English history and to provide a survey of the part the Anglo-Saxon race has played in world history.

Year course (3-3).

8A-8B. History of the Americas.

NASATIR

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis on the process of planting European civilization in the new world, the international contest for the continents, the wars for independence, the development of the American republics, and their relations with each other and with the rest of the world. Based on H. E. Bolton's "Syllabus of the History of the Americas."

Year course (3-3).

UPPER DIVISION COURSES

111A-111B. Ancient History.

LESLEY

Semester I: Social, economic, political, and cultural development of the Greek states with emphasis upon the growth of democracy, attempts at federal union, imperialism, and Hellenism. Semester II: Roman history from the earliest times to the beginning of the medieval period; discussions of Roman imperialism and the main constitutional, economic, social, and religious developments in the republic and the empire.

Year course (3-3).

121A-121B. Medieval History.

LESLEY

General survey of European politics and the cultural development of the Middle Ages; the antecedents of the Renaissance; development of medieval life and institutions, feudalism, the church, the universities, and intellectual tendencies. The rise of towns, of new nations, and of new thought, especially in the twelfth and thirteenth centuries. Period covered 500-1500 A.D.

Year course (3-3). (Not offered in 1933-1934.)

145A-145B. Europe Since 1789.

LESLEY

Revolutionary era; conflict of reaction and liberalism; development of nationalism, with special attention devoted to the unification of Germany and Italy; events leading up to the World War and contemporary problems of Europe resulting from that conflict.

Year course (3-3). (Not offered in 1933-1934.)

146A-146B. Diplomatic History of Europe.

LESLEY

European diplomatic and colonial policies since 1648, with detailed attention to the basic factors in international organization and procedure. During the second semester special emphasis upon the period 1870-1914.

Year course (3-3).

156A-156B. History of British Expansion.

NASATIR

A study of the growth, development, and break-up of the older overseas empire; the beginnings of the newer empire after 1783; the rise, federation, and imperial relations of the self-governing dominions; the crown colony system; India under British rule; and British expansion in Africa and the Pacific.

Year course (3-3). (Not offered in 1933-1934.)

161. South America Since Independence.

NASATIR

A study of the republics of South America. Attention directed to the development of nationality in South America, the struggles for political stability, the exploitation of resources, diplomatic and commercial relations with the United States, and other international problems of South America. Survey of present-day conditions, political, economic, and social.

Spring (3).

163. Mexico and the Caribbean Countries.

NASATIR

Same plan in general as outlined in History 161. Special attention to the relations of the United States with these countries, and to the recent developments in Mexico.

Fall (3).

171A-171B. The Rise of the American Nation.

LEONARD

Semester I. English colonization in North America and the development of colonial institutions and politics. Semester II. The revolutionary movement and the Revolutionary War; the establishment of the government under the Constitution to about 1820. The completion of both semesters of this course meets the requirement on the United States Constitution, for graduation.

Year course (3-3). (Not offered in 1933-1934.)

173A-173B. The Expansion of the United States.

LEONARD

The rise of Jacksonian Democracy; territorial expansion and the Mexican War; the slavery controversy; the Civil War, and reconstruction; the growth and progress of the United States to the World War. The completion of both semesters of this course meets the requirement on the United States Constitution, for graduation.

Year course (3-3).

181A-181B. History of the West.

NASATIR

History of European expansion in North America. Emphasis upon the territorial growth of the United States; the diplomacy and politics of expansion, settlement, and development of the West.

Year course (3-3). (Not offered in 1933-1934.)

199. Special Course for Advanced Students.

LEONARD

Required of all students with a history major in the presecondary curriculum and to be attended during the senior year. Other students interested in history may be admitted with the permission of the instructor.

Spring (2).

HYGIENE

LOWER DIVISION COURSES

1. Personal and Civic (Men).

C. E. PETERSON

An informational course in personal and community hygiene. A study of social hygiene and the hygienic principles of living. Investigations by each student of special topics which serve to vitalize the means for protecting and improving the health of the community. It is especially desirable that this course be taken in the first semester of the freshman year.

Fall and Spring (2).

2. Personal and Civic (Women).

TANNER

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social hygiene in its relations to the practical problems of young women and prospective home makers. The laws and procedures in local civic health matters of particular interest to women studied in detail. Reports following personal investigation of at least three major topics required of each member, these reports being given and discussed before the class. Required of all freshmen who are candidates for the junior certificate or the degree in the presecondary curricula.

Fall and Spring (2).

INDUSTRIAL ARTS

LOWER DIVISION COURSES

A. Mechanical Drawing.

NICOL

Use and care of drafting instruments, lettering, orthographic projections, developments, intersections, tracings. Drafting room six hours per week in the first semester and three hours per week in the second.

Year course (2-1).

1. Descriptive Geometry.

WALLING

Fundamental principles of descriptive geometry and their application to problems of engineering. Lectures and drafting. Prerequisite: Industrial Arts 3A, and sophomore standing.

Fall (3).

22. Machine Drawing.

WALLING

Design and drawing of simple machine parts with emphasis upon the production of standard drawings. Lectures and drafting. Prerequisite: Industrial Arts 21.

Spring (3).

23. Materials of Construction.

WALLING

Structural properties and adaptability of materials used in engineering. Lectures. Open to sophomores.

Spring (2).

25. Elements of Electrical Engineering.

WALLING

Mathematical and descriptive consideration of electrical circuits together with a general survey of the electrical industry. Lectures. Prerequisite: Mathematics 4A or 14A.

Spring (3).

28. Elements of Heat Power Engineering.

WALLING

Fundamental consideration of fuels, combustion, steam, boilers, furnaces, chimneys, steam engines, steam turbines and auxiliaries, internal combustion engines. Lectures. Prerequisite: Mathematics 3B, Physics 1B. Primarily for engineering students other than mechanical or electrical.

Fall (3).

29. Elements of Radio Communication.

WALLING

Theory and characteristics of fundamental radio circuits. Theory and characteristics of the vacuum tube as detector, amplifier, and generator of alternating current power. Lectures. Prerequisites: Physics 1C, Mathematics 4A or 14A or enrollment in those courses.

Fall (3).

NOTE.—Both Industrial Arts 28 and 29 will not be given the same year. The course with the greater demand will be the one given.

JOURNALISM

Lower division preparation in journalism for advanced work and the junior certificate: History 4A-4B, 5A-5B, or 8A-8B; Psychology 1A-4A; English 1A-1B; Secretarial Training 2A; Political Science 1A-1B or Economics 1A-1B; Journalism 51A-51B. Recommended: English 10, or 12A-12B; Speech Arts 1A-1B; Social Economics 50; Economics 18A-18B; Journalism 53A-53B.

For the profession of journalism introductory work in the fields of literature, history, political science, social science, economics, the arts, etc. is recommended.

The aim in the specialized courses in journalism is to offer introductory training in the principles and practices of journalistic writing only after a good foundation in correct speaking and writing English has been laid. Practical training in news reporting and editing for student publication and for the daily press is emphasized.

LOWER DIVISION COURSES

Journalism 51A-51B. News Gathering and Reporting. F. L. SMITH

Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. Course planned for sophomores who have had English 1A-1B, with high school Journalism or equivalents.

Year course (3-3).

Journalism 53A-53B. Applied Journalism. F. L. SMITH

Credit earned for editorial or other staff work throughout a full semester on student publications such as *The Aztec*, *El Palenque*, *Del Sudoeste*. Fall and Spring (1 to 3-1 to 3).

UPPER DIVISION COURSES

Journalism 100. News and Manuscript Editing. F. L. SMITH

Practice in copy reading, proof reading, headline writing, and newspaper makeup. Study of editorial pages. Prerequisite: Journalism 51A-51B or equivalent in composition.

Spring (3).

Journalism 153A-153B. Advanced Journalism Practice. F. L. SMITH

Upper division work of the same type as that in 53A-53B, but with advanced requirements.

Fall and Spring (1 to 3-1 to 3).

NOTE.—Not more than six units in all will be given for journalism practice on student publications.

MATHEMATICS

Lower division preparation for the presecondary major in mathematics and for the junior certificate: Mathematics 3A-3B, 4A-4B. With permission of the department, 7A-7B may replace 3A-3B, and 14A may replace 4A-4B. Recommended: Physics, Surveying, Descriptive Geometry, Astronomy and a reading knowledge of French and German.

Presecondary major (upper division): Twenty-four units of upper division work in mathematics, or 18 units in mathematics and six units in closely related subjects, arranged in consultation with the chairman of the department. Mathematics 111, 112, and 119 should be included in every major, except that students who have taken 14B need not take 119. Related courses offered by other departments include Statistical Methods (Economics 140), Mathematics in the Elementary School and in the Junior High School (Education 129 and 112), and certain upper division courses in chemistry and physics.

LOWER DIVISION COURSES

Intermediate Algebra.

GLEASON

A rapid review of the first year of high school algebra, followed by quadratics, proportions, progressions. Prerequisite: One and one-half years of high school algebra.

Fall (2).

C. Plane Trigonometry.

GLEASON

Right and oblique triangles; logarithms; identities and equations. Prerequisites: Plane geometry and one and one-half years of high school algebra.

Spring (2).

1. Elementary Functions.

LIVINGSTON

Algebra, numerical trigonometry, functions and graphs, introduction to calculus, with emphasis on applications. Prerequisites: Plane geometry and one and one-half years of high school algebra.

Fall (3).

2. Mathematics of Investment.

WRIGHT

Interest and annuities; amortization; sinking funds; valuation of bonds depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Mathematics 1 or B and C or trigonometry and two years of algebra in high school, or equivalent.

Spring (3).

3A-3B. Analytic Geometry and Calculus.

GLEASON, WALLIN

Analytic geometry and differential calculus, together with an introduction to the integral calculus. Prerequisites: Trigonometry, plane and solid geometry, and two years of algebra in high school.

Year course (3-3).

4A-4B. Intermediate Calculus.

LIVINGSTON

Integration, partial differentiation, infinite series and introduction to differential equations. Prerequisite: Mathematics 3A-3B, or a high grade in 7A-7B.

Year course (3-3).

7A-7B. Introduction to Analysis.

LIVINGSTON

Trigonometry, analytic geometry, differential calculus, introduction to integral calculus. Prerequisites: Plane geometry and two years of high school algebra.

Year course (4-4).

8. College Algebra.

LIVINGSTON

Rapid review of elementary algebra, followed by logarithms, progressions and series, permutations and combinations, probability, theory of equations. Prerequisites: Plane geometry, trigonometry, and two years of high school algebra or equivalent.

Spring (3).

10A-10B. Appreciation and History of Mathematics.

THE STAFF

Recreational reading in the history and philosophy of mathematics. Open to those who are taking some other course in college mathematics.

Year course ($\frac{1}{2}$ - $\frac{1}{2}$).

14A-14B. Intermediate and Advanced Calculus.

GLEASON

Integration, partial differentiation, infinite series, differential equations and introduction to vector analysis. Prerequisites: Mathematics 3A-3B or a high grade in 7A-7B.

Year course (5-5).

UPPER DIVISION COURSES

- 01. Elementary Geometry for Advanced Students.** LIVINGSTON
Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry, and calculus. Fall (3).
- 02. Elementary Algebra for Advanced Students.** LIVINGSTON
Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry and calculus. Spring (3).
- 04. History of Mathematics.** GLEASON
A nontechnical course open to students who have some knowledge of the fundamental ideas of mathematics. Fall (3).
- 05. Modern Geometry.** GLEASON
The geometry of the circle and the triangle. Prerequisite: Mathematics 3A-3B or 7A-7B. Fall (3). (Not offered in 1933-1934.)
- 06. Projective Geometry.** GLEASON
The construction and study of conic sections by means of perspectives, poles and polars, and involutions. Prerequisite: Mathematics 105, or permission of the instructor. Spring (3). (Not offered in 1933-1934.)
- 07. Theory of Equations.** LIVINGSTON
General solutions of algebraic equations; approximate numerical solutions; applications. Prerequisite: Mathematics 3A-3B or 7A-7B. Fall (3). (Not offered in 1933-1934.)
- 08. Analytic Geometry of Space.** LIVINGSTON
Planes, lines, and quadric surfaces. Prerequisite: Mathematics 4A or 14A. Spring (3). (Not offered in 1933-1934.)
- 09. Differential Equations.** GLEASON
Ordinary differential equations of first and second order, with applications. Prerequisite: Mathematics 4B or 14A. Spring (3).

MUSIC

For course in preparation for Public School Music teaching, refer to curriculum in Music Education, page 41.

Lower division preparation for the presecondary major in music and for Junior certificate: Music 1A-1B, 2A-2B, 4A-4B, and two units of electives in music. The electives in both lower and upper division must include at least six units in Applied Music (study of voice, or an instrument), of which at least three units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 50.)

Presecondary major (upper division): Music 103A-103B, 105A-105B, 106A-106B, 107A, 107B, 108, and 10 units of upper division elective courses in music. (See statement concerning Applied Music under lower division requirements.)

For information regarding majors and minors in music, and other details not found here, consult the Music Education Adviser.

LOWER DIVISION COURSES

1A. Music Reading and Ear Training—Fundamentals of Music.

BEIDLEMAN, L. D. SMITH, SPRINGSTON

Elementary music theory; scale construction; drill in music reading both with syllables and with words; ear training, elementary music dictation; the elements and materials of music. Basic course used as prerequisite for all advanced music work and for the courses in music education. Text—Gehrken: Fundamentals of Music. Students majoring in music may be exempted from this course by examination.

Fall and Spring (2).

1B. Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, sight singing with Latin syllables and with words. Text—Wedge: Ear Training and Sight Singing. Prerequisite: Music 1A, or the equivalent.

Spring (2).

1C-1D. Advanced Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, and sight singing in two and three parts. Text—Wedge: Advanced Ear Training and Sight Singing. Prerequisite: Music 1A-1B.

Year course (2-2).

1E. Advanced Music Reading and Ear Training.

L. D. SMITH

Advanced tonal and rhythmic dictation, rhythmic writing, and sight singing in two, three, and four parts. Prerequisite: Music 1C-1D.

Fall (2). (Offered in even-numbered years.)

2A-2B. Appreciation and History of Music.

SPRINGSTON

How and of what music is made. How to listen to, enjoy, and appreciate it. The development of music from the earliest times, with a particular effort to gain some acquaintance with the music of the various periods and composers by listening to examples of it. Illustrated with numerous phonograph records. A general fundamental, and nontechnical course, requiring no previous musical training or background.

Year course (2-2).

4A-4B. Elementary Harmony.

SPRINGSTON

Scale construction, intervals, chords, structure, modulation, through various types of seventh chord. Especial attention is paid to the keyboard application of problems in harmonization, transposition, and modulation. Prerequisite: Music 1A, or the equivalent, and at least one year of piano study.

Year course (3-3).

19. Instrumental Ensemble.

BEIDLEMAN

The practice and performance of music for small groups of string, wind, and brass instruments.

Fall and Spring ($\frac{1}{2}$).

20. Vocal Ensemble and Chorus.

L. D. SMITH

A general course open to all students but one which may be offered by music students toward satisfying the requirement in vocal ensemble. Mixed harmony in two, three, and four parts; voice quality, phrasing, interpretation, and enunciation considered in detail; study of song material suitable for junior and senior high school.

Fall and Spring ($\frac{1}{2}$).

UPPER DIVISION COURSES

103A-103B. Appreciation and History of Music—Great Music.

SPRINGSTON

Study of the great masterpieces of music in the larger forms, by means of phonograph records and scores. Prerequisite: Music 2A-2B, or 4A-4B, or equivalent.

Year course (1-1).

105A-105B. Advanced Harmony.

BEIDLEMAN

Completion of harmonic theory; modulation, inharmonic tones, etc. Continuation of harmonic analysis, and keyboard harmony. Melody writing. Prerequisite: Music 4A-4B.

Year course (2-2).

106A-106B. Applied Harmony.

BEIDLEMAN

Form and analysis. Polyphonic treatment of harmony. Introduction to musical composition. Prerequisite: Music 105A-105B.

Year course (2-2).

107A. Conducting.

BEIDLEMAN

The technique of the baton. Methods and materials for use in directing choral organizations. Prerequisite: Music 1A-1B, or 4A-4B.

Fall (1).

107B. Conducting (Instrumental).

BEIDLEMAN

Theory and practice of instrumental conducting, with study of materials and methods. Taught in conjunction with, and requiring participation in, Instrumental Ensemble (Music 119). Prerequisite: Music 107A.

Fall and Spring (1).

108. Instrumentation.

BEIDLEMAN

Theory and practice of arranging music for instrumental combinations. Prerequisite: Music 4A-4B.

Spring (2).

110A-110B. Piano Class Principles.

SPRINGSTON

Materials and methods used in piano classes in the elementary schools. Prerequisite: At least two years of piano study.

Year course (1-1), beginning either semester.

119. **Instrumental Ensemble.** BEIDLEMAN
(See Music 19.)
120. **Vocal Ensemble and Chorus.** L. D. SMITH
(See Music 20.)

MUSICAL ORGANIZATIONS

- 11 or 111. **Treble Clef (Women's) Glee Club.** L. D. SMITH
Membership based on competitive try-outs.
(1-1.)
- 12 or 112. **Men's Glee Club.** BEIDLEMAN
Membership based on competitive try-outs.
(1-1.)
- 13 or 113. **Orchestra.** BEIDLEMAN
(1-1.)

Applied Music

(Credit for applied music is available only for students majoring in music, and is subject to special permission and arrangement.)

- 15 or 115. **Stringed Instruments.**
16 or 116. **Wind Instruments.**
17 or 117. **Voice.**
18 or 118. **Piano (Organ).**

PHILOSOPHY

LOWER DIVISION COURSES

- 5A. **Introduction to Philosophy.** STEINMETZ
Elementary orientation; the persistent problems of philosophy, especially in epistemology, metaphysics, and ethics; the Republic of Plato, and social systems. Prerequisite: Sophomore standing or consent of instructor.
Fall (3).

- 5B. **The Philosophy of Science.** STEINMETZ
The problems of philosophy systematized according to related sciences; their achievements and perplexities; politico-economic movements; technology in modern civilization. Prerequisite: Philosophy 5A, except that sophomores planning to major in natural science may be admitted without prerequisite.
Spring (3).

UPPER DIVISION COURSES

- 105B. **The Philosophy of Science.** STEINMETZ
Same as Philosophy 5B, save that upper division students will be held to more exacting contribution.
Spring (3).

120. Logic, and Philosophy of Mind.

STEINMETZ

Formal and functional logic; examination of reflective procedures in various fields; epistemological assumptions and traditional viewpoints, especially as illustrated in recent scientific writings; review of some psychological, experimentally supported explanations of thought. Prerequisites: Psychology 1A and Philosophy 5A.

Spring (3).

PHYSICAL EDUCATION

Men's Department

A two-hour activity course each semester is required for the two years of lower division. A medical examination is given each student when entering and the work is fitted, as far as possible, to his needs. Physical efficiency tests are given at the beginning in order to classify the student as to his physical ability. These are repeated at the beginning of the three succeeding semesters in order to note improvement and to arrange balance of program so as to acquire all-round development. The content of the required two years is planned to give each student fundamental training in those sports which have carry-over value into after life. Opportunity is given all students to take part in the regular competitive sports program.

LOWER DIVISION COURSES

- A. (Freshman year.) Self-defense and track and field fundamentals.
Fall ($\frac{1}{2}$).
- B. Tennis, swimming, and golf.
Spring ($\frac{1}{2}$).
- C. (Sophomore year.) Instruction and competition in handball, basketball, and speedball.
Fall ($\frac{1}{2}$).
- D. Instruction and competition in volley ball, baseball, and track.
Spring ($\frac{1}{2}$).
- A or B. Golf. Spring ($\frac{1}{2}$).
- A or B. Track. Spring ($\frac{1}{2}$).
- A or B. Baseball. Spring ($\frac{1}{2}$).
- A or B. Basket ball. Spring ($\frac{1}{2}$).
- A or B. Tennis. Fall and Spring ($\frac{1}{2}$).
- A or B. Boxing. Fall and Spring ($\frac{1}{2}$).
- A or B. Wrestling. Fall and Spring ($\frac{1}{2}$).
- A or B. Cross country. Fall ($\frac{1}{2}$).
- A or B. Swimming. Spring ($\frac{1}{2}$).

11A or B. Fencing. Fall and Spring ($\frac{1}{2}$).

13A or B. American football. Fall ($\frac{1}{2}$).

14A or B. Gymnastics. Spring ($\frac{1}{2}$).

The following courses fulfill degree requirements for physical education majors and meet state requirements for teaching credentials in physical education.

54. Administration of Physical Education.

GROSS

The problems that arise in the everyday experience of the instructor in physical education, such as policies in administration, classification of students, administration of activities, organization of the leadership of students, arrangement and care of the physical equipment, personal relationships with students, interdepartmental adjustments, rolls, records and reports. Material presented in latest State Department Manual used as basis.

Fall and Spring (2).

62A. Gymnastic Activities.

C. E. PETERSON

Theoretical and practical work in marching, free exercises, and light and heavy apparatus. Emphasis on progression and method of presenting material. The simplest and most explanatory terminology. Prerequisite: Sophomore standing.

Fall (2).

62B. Gymnastic Activities.

C. E. PETERSON

Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium and on the playground. Work of the recreational or self-interesting type rather than the formal Tumbling, stunts, and pyramid building given chief attention, although games of low organization are also considered. Prerequisite: Sophomore standing.

Spring (2).

UPPER DIVISION COURSES

101. Emergencies.

GROSS

The accepted procedure in meeting the emergencies which daily arise in schoolroom, play or athletic field, beach, mountains, or any of the many places where the physical director is called on for first aid. Special attention given to the arrangement of the apparatus and the activities so that many of the most common accidents are prevented or minimized.

(1)

151. Health Education.

(See Women's Department.)

Fall and Spring (2).

155. Applied Anatomy.

C. E. PETERSON

Mechanics of the human skeletal and muscular systems and their action in games, formalized activities, and general body movements; mechanical strength and durability as influenced by anatomical factors.

(2). (Offered in alternate years.)

156A. Sports Methods.

C. E. PETERSON AND STAFF

Different theories and methods of teaching the more highly organized sports: baseball, basket ball, tennis, and track.
Fall (2).

156B. Sports Methods.

C. E. PETERSON AND STAFF

Methods of teaching those sports most adaptable to intramural and interclass competition: golf, handball, soccer, speedball, and volley ball.
Spring (2).

163. Aquatics.

PHYSICAL EDUCATION STAFF

Details of handling an aquatic program, with stress on swimming, diving, and life-saving; both theory and practice.
Spring (1½).

165. Self-defense Activities.

Both theory and practice of boxing, wrestling, and weaponless defense.
Fall and Spring (1½).

166. Technique of Officiating.

GROSS

Methods of officiating all the sports common to the school or college program; also methods of training student officials. Practice in the handling of elementary, junior high, high school, and interclass college competition.
Fall (1).

71. Community Recreation.

HERREID

Planned to meet the needs of the various workers in community play-ground systems apart from schools, as well as the needs of directors of play and recreation in social service institutions, industrial plants, shops, and factories. Special attention given to scout and campcraft.
Spring (2).

72. Principles of Physical Education.

C. E. PETERSON

The material which seeks to establish the place of physical education and to indicate its indispensable character in modern life.
Fall (2). (Offered in alternate years.)

79. Physical Education Tests and Measurements.

(2).

80. American Football.

HERREID

Theory and practice of individual and team play. Each student taught the fundamentals of football. Two hours of lecture and three hours of laboratory.
Fall (2).

PHYSICAL EDUCATION

WOMEN'S DEPARTMENT

All new students are given a medical examination to the end that the physical needs of each student may be determined and her work planned accordingly. Two hours weekly of directed physical activity are

required in freshman and sophomore years. Emphasis is upon rhythmic activities, games, and sports. In order to meet this requirement, students taking the curriculum leading to the A.B. degree with an elementary credential must take Physical Education 36A-36B, 37, and 38A. Those seeking the junior certificate or the degree in any of the pre-secondary curricula or the degree with the junior high school credential or with a special credential in art, commerce, or music, are required to take Physical Education 36A-36B, 38A-38B.

LOWER DIVISION COURSES

36A. Formalized Activities, Group Games, Stunts. RAW. TANNER
Fall and Spring ($\frac{1}{2}$).

36B. Athletic Games. RAW
Fall and Spring ($\frac{1}{2}$).

37. Game and Rhythmic Activities. TANNER
Prerequisites: Physical Education 36A-36B.
Fall and Spring (1).

38A. Recreational Activities (Elective). RAW. TANNER
Dancing, folk dancing, rowing, stunts, golf, horseback, swimming, tennis, or seasonal sports.
Fall and Spring ($\frac{1}{2}$).

38B. Recreational Activities (Elective). RAW. TANNER
Golf, horseback, swimming, tennis, or seasonal sports; or any one of the following that was not chosen in Physical Education 38A; dancing, folk dancing, rowing, or stunts.
Fall and Spring ($\frac{1}{2}$).

53. Physical Education in the Elementary School. TANNER
Physical education problems, administration of tests, methods of classifying children for play activities, developing leaders, and carrying on intramural ideals. Particular attention given posture problems. The content of the state program in physical education forms the basis of the course. Prerequisite: Physical Education 37A must precede or accompany.
Fall and Spring (2).

*55. Swimming.

A. Beginning or intermediate ($\frac{1}{2}$).

B. Red Cross Life Saving Test ($\frac{1}{2}$).

Required of all freshmen women majoring in physical education.

*56. Tennis.

Required of all sophomore women majoring in physical education. Tests given on playing skills and knowledge of teaching technique.
($\frac{1}{2}$).

* Women majoring in physical education are expected to select one yearly sport as a major activity and two others as minors. This requirement refers to rules, teaching methods, and technique of playing, as well as to the skills of the individual.

***57. Golf.**

Required of all women majoring in physical education.
($\frac{1}{2}$).

58. Rowing.

No credit.

UPPER DIVISION COURSES

102. Emergency and Safety Programs.

RAW

Means by which the number of accidents, especially among children, may be reduced on street, playground, or at home; practical application of first aid methods. Of value to classroom teachers as well as to specialists in physical education.

(1).

151. Health Education.

TANNER

A course for teacher-training students which includes the study of the diseases, common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear in the school; and the elements which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation.

Fall and Spring (2).

53. Administration of Secondary Physical Education.

TANNER

Study of department organization and procedures with practical experience in administration. The college department and like departments in high schools serve as laboratories. Open only to seniors majoring in physical education.

(2).

14. Applied Anatomy.

TANNER

A study of the movements of the human body with especial reference to the physical activities and capacities of girls and women.

(2).

7A-157B. Sports Methods.

RAW

Practice for skill, study of rules, and of coaching methods. Prerequisite: A season's experience in at least four of the following sports—volley ball, basket ball, hockey, speedball, soccer, baseball, tennis, and track activities.

Year course (2-2).

1. Stunts and Tumbling.

RAW

A practical course in personal technique. Progressive series of individual, dual, and group stunts, including simple pyramids.

($\frac{1}{2}$).

* Women majoring in physical education are expected to select one primary sport as a major activity and two others as minors. This requirement refers to rules, teaching methods, and technique of playing, as well as to the skills of the individual.

160. Formalized Activities.

TANNER

The scientific adaptation of formalized exercises to individuals and to groups; an activity and methods class with opportunity for supervised practice teaching; elementary exercises on apparatus.

(2).

161. Folk Dancing.

RAV

A series of folk and national dances for elementary and junior high schools. Emphasis is placed on methods of presentation as well as upon ability to execute the various dances. Note books are required.

(2).

164. Dance Activities.

RAV

A course introductory to dramatic expression, interpretative, character and tap dancing, particularly adapted to elementary and junior high schools.

(2).

170. Recreational Leadership.

TANNER AND STAFF

Fundamentals of recreational leadership developed by instruction in Scout craft, Camp Fire lore, Girl Reserve activities, the study of school recreational needs and facilities, and of civic recreation.

(2).

173. Principles of Physical Education.

TANNER

The relation of physical education to other phases of education, with emphasis upon health and social adaptation.

(2).

174. Campcraft.

TANNER AND STAFF

The technique of life in open camp developed by camp experience preceded by study of selection of equipment, proper outfitting clothes, tents, making beds in the open, making camp fires, camp cooking, and camp recreations. Enrollment only by permission of the instructor.

(2).

175. Current Problems in Physical Education.

TANNER

The latest phases of general physical education; problems particularly related to the work with younger children, girls, and college women; the responsibility of the physical instructor toward emergencies and health service. Open only to seniors majoring in physical education.

(2).

177. Individual Program Adaptations.

TANNER

Adjustments of the physical education program to the physical need and capacities of individuals; problems concerning protective and preventative measures which are not highly specialized corrective phases.

(2).

178A-178B. Camp Fire and Girl Scout Leadership.

The principles and procedures fundamental to leadership in these two important organizations for girls taught by authorized local directors

Useful to college women interested in recreational aspects of social service.
Open to all students.

A. Camp Fire Leadership (1).

B. Girl Scout Leadership (1).

PHYSICS

Lower division preparation in physics for advanced work and for the junior certificate: Required: Physics 1A-1B and 1C-1D; Chemistry 1A-1B; Mathematics C, 3A-3B and 14A-14B, or their equivalents. Recommended: A reading knowledge of French and German.

LOWER DIVISION COURSES

1A-1B. General.

MOE

Mechanics, properties of matter, and heat. A development of the fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. Lectures, text assignments, problem sets, and experimental laboratory work. Two lectures, and one laboratory period each week. Prerequisites: High school physics or chemistry and trigonometry, or concurrent registration in Mathematics C.

Year course (3-3).

1C-1D. General.

BAIRD

A continuation of Physics 1A-1B for students in the sophomore year, including magnetism, electricity, sound, and light. Two lectures and one laboratory period each week.

Year course (3-3).

2A-2B. General.

BAIRD

Properties of matter, mechanics, heat, sound, light, electricity, and magnetism. A nonengineering course. Lectures, demonstrations, and discussions. Prerequisite: Two years of high school mathematics.

Year course (3-3).

3A-3B. Physical Measurements.

MOE

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity, and magnetism. Usually taken in conjunction with Physics 2A-2B.

Year course (1-1).

3A-B. Physical Measurements.

MOE

Same as 3A-3B except that the work is completed in one semester.
Spring (2).

98. Advanced Physical Measurements.

MOE

Lecture and laboratory work on advanced general physics.
Spring (2).

UPPER DIVISION COURSES

106. Optics.

BAIRD

Refraction, color, interference, diffraction, polarization, radiation, and optical instruments.

Fall (3). (Not offered in 1933-1934.)

107A-107B. Electrical Measurements.

BAIRD

Devoted mainly to the study of potentiometer methods, capacity, inductance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics.

Year course (3-3).

108. Modern.

BAIRD

An introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity through gases, radiation and the quantum theory. Prerequisite: Eight units in physics.

Spring (3). (Not offered in 1933-1934.)

199. Special Study.

BAIRD, MOE

Reading or work on special problems in physics. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least eight units of work in the department with grade of A or B.

Fall and Spring (1 or 2—1 or 2).

POLITICAL SCIENCE

Lower division preparation in political science for advanced work and for the junior certificate: Political Science 1A-1B and Economics 1A-1B or History 4A-4B or Geography 1 and 2. High school civics is presupposed in the following courses:

LOWER DIVISION COURSES

1A-1B. Comparative Government.

LEONARD

A comparative study of typical European governments and the government of the United States. Semester I: England, France, Germany, Italy and Switzerland. Semester II: The lesser European states and the United States.

Year course (3-3).

UPPER DIVISION COURSES

101. American Institutions.

LEONARD

Origins and principles of the United States Constitution, and a survey of the political institutions which have developed under it.

Prescribed by the State law for all candidates for the bachelor's degree. Enrollment is limited to juniors and seniors, except with the consent of the instructor. Those taking History 171A-171B, 173A-173B or Political Science 113 are excused from this requirement. Attention is called to the fact that this course is offered only during the Fall semester.

Fall (2).

111. Theory of the State.

LEONARD

The nature of the State, its organization and activities, and its relation to individuals and to other states.

Fall (3).

113. American Political Ideals.

LEONARD

Underlying theories and principles of American governmental policy. Meets the requirement on the United States Constitution for graduation. Spring (3).

PSYCHOLOGY

Lower division preparation in psychology for advanced work and the junior certificate. Required: Psychology 1A-1B, Zoology 1A-1B, or Biology 10A-10B, Philosophy 5A-5B. Recommended: French, German, Chemistry, Physics, and Anthropology.

LOWER DIVISION COURSES

A. General.

BELL, STEINMETZ

An elementary survey of normal adult psychology, focused upon personality; the subjective and objective aspects of behavior; use of a work book assures individual participation and contribution. Furnishes basis for all other courses in psychology. No prerequisites except sophomore standing. Fall and Spring (3).

B. General.

BELL, STEINMETZ

Systematic psychologies, problems of development and of malfunction. Extensive readings of experimental studies: one thorough study required of each student. Prerequisites: Psychology 1A. Spring (3).

C. Applied.

BELL

Applications of psychology to problems of the individual in learning, making social adjustments, choosing a vocation, developing desirable personality traits, and achieving success and happiness. Survey of psychology as applied in business, education, music, art, speaking, writing, and in the professions. No credit for those who have had Psychology 1A. Prerequisite: Psychology 1A. Recommended: Psychology 1B. Fall (2).

D. Psychology Applied in Business.

BELL

Applications of psychology to a wide range of problems encountered by the man in business. Motives, attitudes, habits, and traits in their relation to behavior of employer, employee, and executive. Advertising, salesmanship, and problems of selecting, placing and increasing efficiency of employees. Prerequisite: Psychology 1A. Recommended: Psychology 1B. Spring (2).

UPPER DIVISION COURSES

Genetic (Growth and Development of the Child).

BELL, STEINMETZ

The mental and physical growth and development of the child, especially with relation to norms of structure and function. Diagnosis of individual children by comparison with norms. Behavior problems and growth of personality traits as conditioned by physical and mental factors. An intensive study of one child presenting a problem of phy-

sical or mental maladjustment made by each student. Prerequisites: Psychology 1A, and Education 108 taken either previously or at the same time.

Fall and Spring (3).

105. Mental Testing.

BEL

A brief history of intelligence testing and the fundamental assumptions underlying the construction of tests. The Stanford revision of the Binet-Simon test illustrated by demonstrations. Each student required to give at least 20 individual tests. Group intelligence test discussed and demonstrated. The nature of intelligence and skill in testing it and interpreting results. Prerequisites: Psychology 1A and Education 108. Recommended: Psychology 102, Education 140.

*Fall (3).

118. Mental Hygiene.

BEL

A study of mental health, or the normal mind; factors which contribute to, or disturb integration. Forms of maladjustment and the treatment. Prerequisite: Psychology 1A.

*Spring (2). (Not offered in 1933-1934.)

120. History of Psychology.

STEINMETZ

Historical development of psychology out of mental philosophy; sensationism; the body-mind problem; associationism; structuralism; functionalism; rise of the schools and experimental procedures. Prerequisite: Psychology 1A, 1B.

*Fall (2). (Not offered in 1933-1934.)

140. Contemporary Psychology.

STEINMETZ

Psychoanalysis, behaviorism, and gestalt psychology; the modern eclectic viewpoint; non-Aristotelian speculation; factor analysis; characteristic British, French, German, and American contributions; outstanding problems, publications and fields. Prerequisite: Psychology 1A, 1B, 120, or other upper division work in the department provided by instructor and head of the department consent.

*Fall (2). (Not offered in 1933-1934.)

145. Social.

BEL

Personality as it develops in relation to social environment. Suggestion, imitation, leadership, the crowd, public opinion, social control, prejudice, propaganda, sex differences, race differences, etc. Prerequisite: Psychology 1A.

*Spring (3). (Not offered in 1933-1934.)

160. Experimental: Psychology of Learning.

BROO

Preparatory study of learning, including such topics as laws of learning; improvement in learning; remembering; and forgetting; fatigue and transfer of training. Extensive reading in reports of experimental studies in learning. Individual experimental work required of each student.

* It is planned to give the following courses in alternate years: Psychology 105 and 160; 118 and 145; 120 and 140.

student. Prerequisites: Psychology 1A, 1B. Recommended: Education 130.

*Fall (3). (Not offered in 1933-1934.)

Educational Psychology. See Education 130.

Educational Measurements. See Education 108.

SPEECH ARTS

Lower division preparation in speech arts for advanced work and the junior certificate: 12 units selected from Speech Arts 1A-1B, 55A-55B, 55C-55D.

Students who complete the requirements for the special credential in speech arts at the time of graduation with the bachelor's degree or subsequently may be recommended by the department of education in the college to the State Department of Education for the issuance of that credential. The requirements demand: (1) 15 units in education courses, including Education 121, Education 116 (Practice Teaching in speech arts, 4 units), and a methods course in speech arts; (2) at least a teaching major in speech arts, consisting of 24 units with a minimum of 12 units in upper division courses taken as an upper division student.

The following courses are in the regular accredited curriculum of the English department, and six units may be counted in meeting the lower division requirements for the presecondary major in English. (See page 54.)

LOWER DIVISION COURSES

A. Elements of Public Speaking.

PEAFF

Training in fundamental processes of oral expression: methods of obtaining and organizing material; outlining principles of attention and delivery; extemporaneous speaking and open forum debating; practice in construction and delivery of type forms of speech.

Fall and Spring (3).

B. Argumentation and Debate.

PEAFF

Obtaining and organizing of evidence and the construction and use of the brief; study and discussion of current issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating.

Spring (3).

C. Oral Interpretation.

PEAFF

The oral interpretation of longer literary selections, both in poetry and prose; designed to assist the beginning student in drama as well as the student majoring or minoring in English literature.

Fall (3).

55A-55B. Play Production.

JONES

History and technique of dramatic production, with special emphasis on contemporary drama. Rehearsals and presentation of scenes and plays. Arranged for students interested in all the theater arts.

Year course (3-3).

* It is planned to give the following courses in alternate years: Psychology 105 and 160; 118 and 145; 120 and 140.

55C-55D. Dramatic Interpretation.

JONES

Use of speaking voice, correct diction, gesture, and pantomime. Principles of characterization and standards of acting. Practical working knowledge of different types of plays through rehearsal and presentation.

Year course (3-3).

UPPER DIVISION COURSES

155A-155B. Dramatic Workshop.

JONES

Advanced work along lines of student's individual dramatic interests: acting, directing, staging, costuming, play writing, and the like. Special attention given to creative work and practical experience. Prerequisites: Speech Arts 55A-55B.

Year course (3-3). (Not offered in 1933-1934.)

156A-156B. Advanced Play Production.

JONES

Special training in educational, recreational and community drama activities for professional use. Practical production experience. Prerequisite: Speech Arts 55A-55B and instructor's consent.

Year course (3-3).

SURVEYING

LOWER DIVISION COURSES

1A-1B. Plane Surveying.

NICOL

Use and adjustment of surveying instruments, computations and map-making, together with a study of land, topographic, city, and mine surveying. Two instruction periods and one three-hour period for field work and mapping each week. Prerequisite: Trigonometry and Mechanical Drawing.

Year course (3-3).

2. Summer Class in Surveying.

NICOL

Practical field problems in reconnaissance, triangulation, location and topographic surveys. Observations for meridian, time and latitude. Precise work in linear and angular measurements. Development of self-reliance, accuracy, and professional skill on the part of the student. Four weeks course, commencing after the close of the second semester. Prerequisite: Surveying 1A-1B.

(3).

3. Applied Astronomy.

NICOL

Lecture course in principles of practical astronomy for engineers. Lectures, supervised problem solution and assigned problem sets, on the fundamental formulae of spherical trigonometry and their application to the solution of observation on the sun and Polaris for time, latitude, and azimuth of a course.

Spring (1).

ZOOLOGY

(See Biological Sciences)

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Bulletin

San Diego State Teachers College

AND

Announcement of Courses

1934-1935



June, 1934

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SACRAMENTO, 1934

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State Teachers College of San Diego

Volume Twenty-two JUNE, 1934

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STATE TEACHERS COLLEGE OF SAN DIEGO

Administered Through

UNIVERSITY OF ILLINOIS

DIVISION OF NORMAL AND SPECIAL SCHOOLS

OF THE

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Published Quarterly by the State Teachers College of San Diego
SAN DIEGO, CALIFORNIA

CALENDAR 1934-1935

SUMMER SESSIONS, 1934.

Term I, six weeks, June 25-August 3.

Term II, three weeks, August 6-August 25.

FALL SEMESTER, 1934-1935.

- September 11, 8.30-12.00 a.m., Registration of Old Students with Initials A-K.
- September 11, 9.00-12.00 a.m., and 1.00-2.00 p.m., Payment Fees by Students who Preregistered.
- September 11, 8.30 a.m., Examination in Subject A (English Composition).*
- September 11, 2.30 p.m., Fundamentals Test.*
- September 12, 8.30 a.m., College Aptitude Test.*
- September 12, 10.00-12.00 a.m., Entrance Examination in Music (by Appointment).§
- September 12, 8.30-12.00 a.m., Registration of Old Students with Initials L-Z.
- September 12, 9.00-12.00 a.m., and 1.00-2.00 p.m., Payment Fees by Students who Preregistered.
- September 12, 1.30 p.m., Official Assembly for New Students Attendance required.
- September 13, 8.30-12.00 a.m., Registration of New Students with Clear Admission and Returning Students.
- September 14, 8.30-12.00 a.m., Registration of New Students with Provisional Admission and Returning Students.
- September 17, Class Work Begins.
- November 12, Armistice Day Holiday.
- November 29-December 2, Thanksgiving Recess.
- December 15, Christmas Recess Begins.
- January 7, Class Work Resumes.
- January 28-February 1, Mid-Year Examinations.

SPRING SEMESTER, 1935.

- February 4, 9.00 a.m., Examination in Subject A (English Composition).*
- February 5, 8.30-12.00 a.m., Registration of Old Students with Initials A-K.
- February 5, 9.00 a.m., Fundamentals Test.*

* See page 20.

§ See page 40.

February	5,	9.00-12.00 a.m., and 1.00-2.00 p.m., Payment of Fees by Students who Preregistered.
February	6,	8.30-12.00 a.m., Registration of Old Students with Initials L-Z.
February	6,	8.30 a.m., College Aptitude Test.*
February	6,	10.00-12.00 a.m., Entrance Examination in Music (by Appointment).§
February	6,	8.30-12.00 a.m., Registration of Old Students.
February	6,	9.00-12.00 a.m. and 1.00-2.00 p.m., Payment of Fees by Students who Preregistered.
February	6,	1.30 p.m., Official Assembly for New Students—Attendance required.
February	7,	8.30-12.00 a.m., Registration of New Students with Clear Admission and Returning Students.
February	7,	1.00-3.00 p.m., Registration of New Students with Provisional Admission and Returning Students.
February	11,	Class Work Begins.
April	14-21,	Easter Recess.
May	1,	Dedication Day.
May	30,	Memorial Day.
June	7-13,	Final Examinations.
June	14,	Annual Commencement Exercises.

SUMMER SESSIONS, 1935.

Term I, six weeks, June 24-August 2.

Term II, three weeks, August 5-August 24.

FACULTY

- EDWARD L. HARDY, LL.D., President SCHOOL ADMINISTRATION
B.L., University of Wisconsin; M.A., University of Chicago; LL.D.
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Study of European secondary schools.
Principal of San Diego High School. (Appointed September, 1910.)
- IRVING E. OUTCALT, M.A. VICE PRESIDENT AND PROFESSOR OF ENGLISH
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Student, University of Illinois; graduate study and research work
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Head of Department of English, San Diego High School.
(Appointed September, 1912.)
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B.S., Valparaiso University; M.A., University of South Dakota.
Student Miami University; graduate student, University of Iowa and
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Superintendent of city schools; conductor and instructor in teachers'
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A.B., College of the Pacific; M.A., Stanford University.
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- CHARLES E. PETERSON, A.B. DEAN OF MEN AND ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND
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A.B., State Teachers College of San Diego.
Student, Oregon Agricultural College and University of California.
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Director of Playgrounds, Portland, Oregon; Director of Physical
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- MARY IRWIN McMULLEN, A.B. DEAN OF WOMEN AND PLACEMENT
SECRETARY AND ASSISTANT PRO-
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A.B., State Teachers College of San Diego.
Graduate student, University of Chicago.
Public school teacher, Oakland, California.
(Appointed Secretary to the President July, 1926; Director of
Placement July 1930; Dean of Women January, 1934.)
- JOHN R. ADAMS, M.A. ASSOCIATE PROFESSOR OF ENGLISH
A.B., M.A., University of Michigan.
Graduate student, University of Southern California.
Instructor in Rhetoric, University of Michigan; Associate in Eng-
lish, University of Washington. (Appointed September, 1928.)
- GEORGIA C. AMSDEN ASSOCIATE PROFESSOR OF COMMERCE
Gregg School, Chicago; special secretarial training in various insti-
tutions; University of California summer session and extension divi-
sion work.

Teacher in University of California summer school; Traveling Representative and Secretary for the Federal Board for Vocational Education, France, World War; in charge of Stenographic Division, Department of Personnel, American Red Cross Headquarters, Paris, World War; Secretary, Standard Life and Accident Insurance Company, Detroit, Michigan; Assistant Editor and Reporter, Daily Press, Ypsilanti, Michigan; Instructor, San Diego High School.
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Graduate student, Stanford University; University of California; Teachers College, Columbia University.
Teacher in Public Schools; Primary Supervisor.
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A.B., University of Wisconsin; M.A., University of California.
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Head of Science Department, University of Wisconsin High School and Stadium High School, Tacoma, Washington; Assistant in Physics Department, University of Washington, Seattle.
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B.S., B.Mus., Columbia University.
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A.B., Indiana University; M.A., Stanford University.
Graduate, Indiana State Normal School; Research Work, Clark University. Travel in Europe.
Assistant in Education and Director of Practice Teaching, University of Colorado; State Institute Lecturer, Montana; Instructor, School of Education, Indiana University.
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Pupil in Paris of Andre Lhote, Painter, and of Mme. Alexandra Exter, Russian Stage Designer.
Instructor in Fine Art, Pasadena Junior High School.
(Appointed September, 1927.)

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* On leave of absence 1934-1935.

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LESLIE P. BROWN, M.A.

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Graduate student, University of Southern California.
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Professor of Economics, University of Omaha; Teaching Fellow in Economics, University of California. (Appointed September, 1929.)

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Assistant in Geography, University of Wisconsin; Teacher, Oak Park High School, Illinois; Instructor in summer session, University of California at Los Angeles. (Appointed September, 1914.)

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INSTRUCTOR IN BIOLOGY

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(Appointed September, 1932.)

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ASSOCIATE PROFESSOR OF EDUCATION

A.B., University of Denver; A.M., Ph.D., Columbia University.
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Assistant Professor, University of Arkansas and Kansas State Teachers College. (Appointed September, 1931.)

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DIRECTOR OF ATHLETICS AND ASSISTANT
PROFESSOR OF PHYSICAL EDUCATION

A.B., State Teachers College of San Diego.
Teacher, Chula Vista Grammar School; Basket Ball Coach, U. S. Marines and U. S. Naval Hospital. (Appointed September, 1929.)

ILSE HAMANN, B.A.

INSTRUCTOR IN ART

B.A., University of California at Los Angeles.
Student, Rudolph Schaeffer School; pupil of Douglas Donaldson.
Teacher, San Bernardino City Schools; Instructor, Northwestern University, Evanston, Illinois; Instructor, Santa Ana Junior College. (Appointed February, 1934.)

- EDITH C. HAMMACK, B.A. TRAINING SUPERVISOR AND ASSOCIATE
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B.A., State Teachers College of San Jose.
Graduate, State Normal School of San Diego; graduate student,
University of California.
Public School Teacher. (Appointed February, 1911.)
- DOROTHY R. HARVEY, M.A. ASSISTANT PROFESSOR OF BOTANY
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Graduate student, Scripps Institute for Biological Research, La
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Public school teacher. (Appointed September, 1924.)
- ROBERT D. HARWOOD, Ph.D. ASSOCIATE PROFESSOR OF ZOOLOGY
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Natural Survey of Illinois; Teacher, Kern County Union High School
and Junior College, Bakersfield; Assistant in Entomology, Cornell
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- WALTER B. HERREID, A.B. ASSISTANT PROFESSOR OF PHYSICAL
EDUCATION
A.B., Washington State College.
Graduate student, University of California and University of South-
ern California.
Freshman Football Coach, Washington State College; Director of
Physical Education, Aberdeen High School, Aberdeen, Washington;
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Coach, Huntington Park Union High School.
(Appointed September, 1930.)
- VERETT GEE JACKSON, A.B. ASSISTANT PROFESSOR OF ART
A.B., State Teachers College of San Diego.
Student, Agricultural and Mechanical College of Texas; Art Insti-
tute of Chicago.
Associate Professor, Sul Ross Teachers College, Alpine, Texas;
three years of travel and art study in Mexico; painter.
(Appointed November, 1930.)
- ARGUERITE VEASEY JOHNSON, A.M. REGISTRAR AND ASSOCIATE
PROFESSOR OF LATIN
A.B., Radcliffe College; A.M., Columbia University.
Teacher of Latin, History and French; Assistant in the Registrar's
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- MYRTLE ELIZABETH JOHNSON, Ph.D. PROFESSOR OF BIOLOGY
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Director, Junior Players of Pasadena Community Playhouse; Drama
Instructor in Chouinard Art School, Los Angeles; Organizing Secretary
and Instructor in Playwriting of Summer Art Colony at Pasadena
Community Playhouse; Drama Organizer and Director of San Diego
Community Service. (Appointed September, 1925.)
- SEPH SUMNER KEENEY, Ph.D. INSTRUCTOR IN ENGLISH
A.B., M.A., Yale University; Ph.D., University of California.
Instructor in English, Yale in China, Changsha, China; Instructor
San Diego Army and Navy Academy; Instructor in English, Univer-
sity of California. (Appointed February, 1933.)

GENEVIEVE KELLY, A.M.

INSTRUCTOR IN SOCIOLOGY

A.B., University of California; A.M., Columbia University.
Student, Los Angeles Public Library School. Graduate student
University of Chicago. Travel in Europe.
Teacher, Corcoran Union High School. Librarian, Northern Arizona
Normal School, Flagstaff; Scripps Foundation for Research in Population
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CHARLES B. LEONARD, Ph.D.

PROFESSOR OF HISTORY

A.B., M.A., Ph.D., University of California.
Instructor in History, Lowell High School, San Francisco; Teaching
Fellow in History, University of California. (Appointed September, 1928)

LEWIS B. LESLEY, Ph.D.

ASSOCIATE PROFESSOR OF HISTORY

A.B., Stanford University; M.A., Ph.D., University of California.
Native Sons' Traveling Fellow in Europe from University of California.
Instructor, Principia School, St. Louis, Missouri; Teaching Fellow
in History, University of California; Assistant Professor of American
History, Pomona College. Summer session staff, Claremont College.
Member, University of California Lecture Bureau. (Appointed September, 1928)

GEORGE R. LIVINGSTON, M.A.

ASSOCIATE PROFESSOR OF MATHEMATICS

B.S., M.A., University of California.
Instructor, San Diego Junior College; Head of Department
Mathematics, Santa Barbara Junior College. (Appointed September, 1928)

ELMER ALLEN MESSNER, M.A.

INSTRUCTOR IN CHEMISTRY

A.B., M.A., Stanford University.
Student, Marquette University, Milwaukee, Wisconsin; State Teachers
College of San Diego. Registered Assistant Pharmacist, State of
Wisconsin; Licentiate in Pharmacy, State of California. Graduate
student, University of Breslau, Germany. (Appointed September, 1931)

CHESNEY RUDOLPH MOE, M.A.

INSTRUCTOR IN PHYSICS

A.B., M.A., Stanford University.
Student, State Teachers College of San Diego. Graduate student
University of Southern California. (Appointed September, 1931)

ABRAHAM P. NASATIR, Ph.D.

ASSOCIATE PROFESSOR OF HISTORY

A.B., M.A., Ph.D., University of California.
Native Sons' Traveling Fellow in History in Europe.
Assistant Teaching Fellow in History, University of California.
Instructor in History, State University of Iowa. Social Science
Research Council Fellow, 1930-1931. (Appointed January, 1928)

WILLIAM L. NIDA, M.A.

PROFESSOR OF EDUCATION, SUPERVISOR OF
PUBLIC SCHOOL PRACTICE TEACHING

Ph.B., Ohio State University; M.A., University of Southern California.
Graduate student, University of Chicago.
Principal of Ohio High Schools; Superintendent of Schools in Illinois;
Supervisor, Junior High School, San Diego. (Appointed July, 1921)

LENA PATTERSON, M.A.

ASSOCIATE PROFESSOR OF ART

A.B., B.S., Ohio University; M.A., Columbia University.
Student, Cincinnati Art Academy; Chicago Art Institute; Otis Art
Institute; Rudolph Schaeffer School; Reimann School and Itten School,
Berlin, Germany; Zweybruck School, Vienna, Austria.
Assistant, Ohio University; Professor, State Teachers College, Kirksville,
Missouri; Assistant Scholar, Art Department, Columbia University;
Instructor, Chouinard School of Art, Los Angeles. (Appointed July, 1933)

PAUL LEWIS PFAFF, B.A.

INSTRUCTOR IN ENGLISH

B.A., Stanford University.

Student, State Teachers College of San Diego; graduate student, Claremont Colleges. (Appointed September, 1931.)

WALTER T. PHILLIPS, M.A.

ASSOCIATE PROFESSOR OF SPANISH
AND FRENCH

A.B., University of Washington; M.A., Stanford University.

Graduate student, National University of Mexico; Institute of French Education, Pennsylvania State College.

Teaching Assistant in Spanish, Stanford University; Assistant Professor of Modern Languages, Willamette University; Instructor in Spanish, Brown University. (Appointed September, 1927.)

MABEL M. RICHARDS, A.M.

TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION

B.S., A.M., University of Missouri.

Graduate student, University of Southern California.

Rural, City and High School Teacher; City Superintendent of Schools; Supervisor of Mathematics, Training School, State Teachers College, Warrensburg, Missouri; Director in Demonstration School, Northeast Missouri State Teachers College. (Appointed September, 1921.)

DUDLEY H. ROBINSON, M.S.

ASSOCIATE PROFESSOR OF CHEMISTRY

B.Sc. in Sugar Engineering, University of Louisiana; M.S., State University of Iowa.

Chemist, University of Louisiana Sugar House; Raceland Sugar Factory; State Sugar House, Louisiana; Research Chemist, Thornley and Company; Chief Chemist, Pacific Marine Chemicals, Inc. (Appointed September, 1928.)

SPENCER L. ROGERS, A.M.

INSTRUCTOR IN ANTHROPOLOGY
AND ENGLISH

A.B., State Teachers College of San Diego; A.M., Claremont Colleges.

Student in Archaeology, School of American Research, Santa Fe, New Mexico.

Curator in Anthropology, San Diego Museum; honorary curator in prehistory, San Diego, Museum. (Appointed September, 1930.)

W. T. SKILLING, M.S.

PROFESSOR OF ASTRONOMY

B.S., M.S., University of California.

Student, State Normal School, Los Angeles; Stanford University.

Teacher, Los Angeles County and City public schools; Assistant in Physics, University of California. (Appointed September, 1901.)

FLORENCE L. SMITH, M.A.

ASSOCIATE PROFESSOR OF ENGLISH

A.B., Northwestern University; M. A., University of Chicago.

Graduate student, Medill School of Journalism, Chicago.

Instructor, State Normal School, Oshkosh, Wisconsin.

(Appointed July, 1917.)

L. DEBORAH SMITH, A.M.

ASSOCIATE PROFESSOR OF MUSIC

Mus.B., A.B., Oberlin College; A.M., Columbia University.

Graduate student, Stanford University.

Head of Department of Music, State Teachers College, Winona, Minnesota. (Appointed September, 1922.)

MARIAN PEEK SMOOR, A.M.,

TRAINING SUPERVISOR AND ASSOCIATE
PROFESSOR OF EDUCATION

A.B., A.M., Stanford University. Travel in Europe.

Teacher in Public Schools; Assistant in History, Stanford University; Dean of Women, State Normal School, Cheney, Washington; Instructor, Francis W. Parker School, San Diego, California.

(Appointed September, 1923.)

CHRISTINE SPRINGSTON, B.M. ASSISTANT PROFESSOR OF MUSIC

B.A., B.M., University of Redlands.
Graduate student, University of Redlands and University of Southern California; student in piano with A. E. Guerue of St. Louis and Olga Steeb of Los Angeles. "Diploma of Execution," Conservatoire Americain, Fontainebleau, France.
Supervisor of Music, Needles, California; Assistant in Piano, Organ and Theory, University of Redlands; Instructor, San Diego High School.
(Appointed September, 1930.)

HARRY C. STEINMETZ, A.M., ASSOCIATE PROFESSOR OF PSYCHOLOGY AND PHILOSOPHY

A.B., University of California; A.M., University of Southern California.
Assistant in Journalism, University of the Philippines, Manila; Assistant in Educational Psychology, University of California; Instructor, Glendale Union High School and San Mateo Junior College.
(Appointed September, 1930.)

JOHN PAUL STONE, M.S. LIBRARIAN

B.S., Northwest Missouri State Teachers College; M.S., University of Illinois Library School.
Instructor in English and Public Speaking, Senior High School, Joplin, Missouri; Library work, University of Illinois Library; Professor of Library Science, Louisiana State Teachers College.
(Appointed September, 1930.)

ALVENA SUHL, M.A. ASSOCIATE PROFESSOR OF GEOGRAPHY

A.B., M.A., University of California.
Teaching Fellow, University of California; teacher in public schools.
(Appointed September, 1926.)

JESSIE RAND TANNER, B.S. ASSOCIATE PROFESSOR OF PHYSICAL EDUCATION AND DIRECTOR OF PHYSICAL EDUCATION FOR WOMEN

B.S. and Bachelor's Teaching Diploma, Teachers College, Columbia University.
Graduate, Boston Normal School of Gymnastics; Graduate student, University of California and University of Southern California.
Tutor, Brookline, Massachusetts; Supervisor of Physical Education, San Diego County Rural Schools, 1921-1923. (Appointed July, 1904.)

FRANKLIN D. WALKER, Ph.D. ASSOCIATE PROFESSOR OF ENGLISH

B.A., (Hons. Oxon), University of Oxford; Ph.D., University of California.
Student, University of Arizona; Holder of Arizona Rhodes Scholarship to Oxford; Graduate student, University of California.
Instructor in Dramatics, Francis W. Parker School, San Diego, California.
(Appointed September, 1926.)

HILDE MARIE KRAMER WALKER, A.B. INSTRUCTOR IN GERMAN

A.B., Northwestern University.
Graduate student, Northwestern University, Evanston, Illinois; University of Chicago.
Teacher in high schools of Illinois; Assistant, Northwestern University.
(Appointed September, 1931.)

CURTIS REYNOLDS WALLING, E.E. INSTRUCTOR IN MATHEMATICS AND INDUSTRIAL ARTS

A.B., E.E., Stanford University.
Student, State Teachers College of Fresno; graduate student, Stanford University. Graduate student training course, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pennsylvania.
(Appointed September, 1931.)

*ALICE M. RAW WARNER, A. B. ASSISTANT PROFESSOR OF PHYSICAL
EDUCATION

A.B., University of Southern California.
Graduate student, University of Southern California. Travel in
Europe. (Appointed September, 1923.)

W. H. WRIGHT, M.A. ASSOCIATE PROFESSOR OF COMMERCE

B.S., M.A., University of California.
Head of Department of Commerce, Visalia Union High School,
Visalia, California. (Appointed September, 1921.)

SUPPLEMENT TO FACULTY LIST FOR 1934-1935

ISABELLA STEWART HAMMACK, M.A. TRAINING SUPERVISOR AND ASSO-
CIATE PROFESSOR OF EDUCA-
TION

A.B., M.A., University of California.
Teacher, San Diego city and county schools; Assistant in Depart-
ment of Education, University of California; Instructor, Normal Uni-
versity, Los Vegas, New Mexico; Assistant Professor in Education
and Child Development, Mills College. (Appointed September, 1933.)

ASSOCIATE (PART-TIME) MEMBERS OF THE FACULTY

ELIZABETH McPIKE BROWN, PH.D. ASSISTANT PROFESSOR OF FRENCH
Ph.B., M.A., Ph.D., University of Chicago.

Diplôme de Phonétique, Ecole des Hautes Etudes, Paris, France;
Certificate d' Etudes Francaises, University of Paris.

Assistant in French, University of Chicago; Head of French Depart-
ment, Rockford College, Rockford, Illinois; Instructor in University
of California, Extension Division, San Diego, California.

MARIAN EVANS, B.S. INSTRUCTOR IN EDUCATION

B.S., New York University.
Graduate, State Normal School, Los Angeles; Student, University
of California, University of New Mexico, State Teachers College of
San Diego.

Teacher, San Bernardino, Sierra Madre, San Marino; Director of
Visual Education Activities, San Diego City Schools.

REGINALD POLAND, A.M. PROFESSOR OF ART

A.B., Brown University; A.M., Princeton University; A. M., Harvard
University.

Fellowship from Princeton University to American Academy at
Rome.

Director of Denver Art Association; Educational Secretary, Detroit
Institute of Art; Director of San Diego Fine Arts Gallery.

WILL J. STANTON, LL.B. ASSISTANT PROFESSOR OF LAW

LL.B., University of Michigan.

Graduate student, University of Michigan.

Editor legal journal; Practicing attorney, Michigan and California.
Instructor, San Diego High School and Junior College.

ASSISTANTS

AUDREY BOWEN PETERSON, A.B.

FLORENCE I. SHAFER, A.B.

CHARLES ROBERTS SMITH, A.B.

TRAINING SCHOOL
PHYSICAL EDUCATION
PHYSICAL EDUCATION

* On leave of absence 1934-1935.

SUPERVISORS IN THE EUCLID SCHOOL

HELEN K. SYLVESTER	PRINCIPAL
MURIEL CLAYTON	
MRS. AGNES E. CRAFTORD	RUTH M. COOPER
RUTH MERRILL	MRS. MARIE M. JOHNSON
	VESTA M. PETERSEN

MEDICAL EXAMINERS

O. S. HARBAUGH, M.D.	MEDICAL EXAMINER (MEN)
MARTHA WELPTON, M.D.	MEDICAL EXAMINER (WOMEN)

LIBRARY STAFF

JOHN PAUL STONE, M.S. IN LIBRARY SCIENCE	LIBRARIAN
ELSIE ANDERSEN, A.B.	ASSISTANT LIBRARIAN: CIRCULATION
LULU GERMANN, B.S.	ASSISTANT LIBRARIAN: REFERENCE AND CIRCULATION
GENEVIEVE KELLY, A.M.	ASSISTANT LIBRARIAN: CATALOGING
GERALDINE KIRKHAM, AB., BS.	ASSISTANT LIBRARIAN: REFERENCE, CATALOGING AND CIRCULATION
HARRIET B. STOVALL	ASSISTANT LIBRARIAN: REFERENCE AND REPAIR
CHARLOTTE G. ROBINSON	LIBRARIAN OF TRAINING SCHOOL

STAFF OF REGISTRAR'S OFFICE

MARGUERITE V. JOHNSON, A.M.	REGISTRAR
DOROTHY MAY HARRISON	ASSISTANT REGISTRAR
MADOLYN M. BARNES, B.A.	RECORDER

STAFF OF BUSINESS OFFICE

F. W. VAN HORNE	FINANCIAL SECRETARY
L. J. CROUCH	ASSISTANT FINANCIAL SECRETARY
MAYME J. SULLIVAN	TELEPHONE OPERATOR

STAFF OF PLACEMENT OFFICE

MRS. MARY IRWIN McMULLEN, A.B.	DIRECTOR
ANNE SULLIVAN MOLDENHAUER	SECRETARY

TRAINING SCHOOL STAFF

ERBY CHESTER DEPUTY, Ph.D.	PRINCIPAL
FLORENCE WIGGINS	SECRETARY

MAINTENANCE STAFF

C. L. FISKE	BUILDINGS
MARTIN ROTH	GROUNDS
A. L. SEELIG	HEAT AND MECHANICAL EQUIPMENT
W. T. BOWEN	CUSTODIAN

THE COLLEGE

HISTORICAL SKETCH

The State Teachers College of San Diego, usually designated the San Diego State College and formerly known as the State Normal School of San Diego, was established by legislative enactment March 13, 1897, and received its first class in the autumn of 1898. In April, 1921, the school, together with all of the California normal schools, received by act of the Legislature, later approved by the Governor of the State and becoming effective July 28, 1921, the designation of State Teachers College, its full legal title being, "State Teachers College of San Diego."

In June, 1921, under an enactment of the legislative session of the same year, known as the "Junior College Law," the San Diego Junior College was merged with the State Teachers College of San Diego. Under the arrangement thus made, collegiate courses of the lower division (freshman and sophomore years) were offered, both to students preparing for the work of the upper division (junior and senior years) of colleges and universities and to students preparing themselves for the teaching service in the new three and four-year curricula recently established by the State Board of Education. The four-year curricula leading to the A.B. degree (major in Education) were established for this institution June 30, 1923.

Since July 1, 1927, the courses formerly carried as "junior college" courses have been offered as lower division courses of the regular four-year curricula. On July 12, 1928, the college was authorized by the State Board of Education to offer presecondary curricula with majors in Chemistry, History, English and Romanic languages, and special secondary certification curricula with majors in Physical Education, and Art, all of them leading to the A.B. degree. On January 6, 1930, the State Board of Education authorized the following additional majors in the presecondary curricula: Art, Biological Science (Zoology now offered), and Social Sciences (Economics, Geography and History now offered); also the special secondary certification curriculum with a major in Music. On April 12, 1930, the presecondary major in Commerce was authorized by the State Board of Education, and also the special secondary certification curriculum with a major in Commerce. On June 27, 1931, and on March 18, 1932, presecondary majors in Music and Mathematics were authorized respectively in the same manner.

For the certification of teachers, the authorized courses (elementary, junior high school and special secondary) are offered and, requiring four years of work, lead to the A.B. degree with any one or a combination of the following credentials: Elementary School, Junior High School, Special Secondary in Art, Special Secondary in Commerce, Special Secondary in Music, Special Secondary in Physical Education.

ENVIRONMENT AND STANDARD

OPPORTUNITIES FOR CULTURE AND RECREATION

Environmental conditions other than physical must be taken into account by the student choosing a college. In cultural standards in art, music, literature, and science, San Diego is a favorable college city because, while it is not large, yet it has certain metropolitan advantages for the student. Many of these are to be found in the heritage resulting from the San Diego Exposition of 1915-16, including the buildings themselves, which in their consistent and effective carrying out of motifs of the best types of Spanish colonial art, make up one of the finest exhibits in architecture in America. Housed in these buildings are exhibits in anthropology and culture history which are unsurpassed in certain fields, together with natural history collections, and materials for the study of American archaeology. There is complete cooperation with the directing boards controlling the collections. The Fine Arts Gallery contains excellent exhibitions of paintings. There are plans for the development of a Public Conservatory of Music for which the great out-of-door organ furnishes a beginning. Balboa Park, in which all of these facilities are located, also contains a modern horticultural farm and a great stadium for games, community gatherings, and pageants.

At La Jolla, within the city limits, the Scripps Institution of Oceanography, operated by the University of California, gives opportunity for important cooperation in the biological field.

The courses in commerce and other branches of economics will be considerably aided by San Diego's growing importance as a commercial point particularly as the college will be able, as is planned, through its department of economics, to assist the local Chamber of Commerce in industrial and commercial surveys.

The teacher-training program profits because of the policy of cooperation generously followed by the City School Department, which has resulted in a plan for laboratory work in practice teaching in the city schools. San Diego's fine system of schools, with all of the modern divisions of kindergarten, elementary school, junior high schools, and senior high schools, furnishes unusual opportunities for observation and demonstration to students in training, and for cooperation between the specialists of the city school system and the college.

PHYSICAL CONDITIONS: CLIMATE

The physical conditions in San Diego for study are unsurpassed, since sustained intellectual effort can be maintained always with comfort in the cool, even climate of the place. Temperatures are usually shown on a globe by lines which pass through regions of the same degree of heat or cold. Red lines of 60 degrees and 70 degrees, showing the summer temperature at San Diego, enclose Alaska and Siberia. Blue lines of 59 degrees and 60 degrees, showing the winter temperature at San Diego, enclose Egypt and Arabia. Thus San Diego may be said to have Alaskan summers and Egyptian winters.

Recreational opportunities of an unusual number and variety are open to students, because of the combination of bay, sea beach, mesas, foothills, and mountains, all within compass of two hours travel by automobile. Outdoor sports of all kinds, including swimming and rowing, are possible the year round.

BUILDINGS AND EQUIPMENT

On February 1, 1931, the college was moved to the new buildings and campus, located one mile north of the city's principal east-west boulevard, El Cajon Avenue. The campus has an area of one hundred twenty-five acres. The new buildings are part of a general plan to be completed within the next few years. This plan calls for one style of architecture for the entire group of the Spanish-Moorish type, which is well suited to the landscape and climate of the region. The buildings now in use include the Academic Building, which houses lecture halls, classrooms, and administrative offices; Science Building; Library; Little Theater; Training School; Scripps Cottage (a social clubhouse for women students); the Student Building, housing the soda fountain, cafe, and bookstore; the Physical Education Building, a structure of the duplex gymnasium type, with adequate facilities for the physical education and development of both men and women. The campus also contains playing fields and courts for collegiate sports and athletics. The training school is supplied with its own, separate play spaces.

AFFILIATED PRACTICE SCHOOL

The Euclid School, a San Diego City elementary school, is affiliated with the college for practice teaching purposes. Cadets are assigned to teach in this school after having had successful initial experience in the Training School or elsewhere. The assignment is for a full half-day for the semester and carries a maximum of seven and one-half units of credit.

STANDARDS OF HEALTH, SCHOLARSHIP AND CHARACTER

All entering students are required to meet the health standards set by the department of physical education, and all lower division students, unless excused for cause, are required to take the courses in physical education, prescribed for freshmen and sophomores. Furthermore, each student is expected as a matter of efficient student and community life to keep himself in the best possible physical condition.

Standards of scholarship are based upon high entrance standards. Frequent ratings of the student are made by his instructors, so that he may at all times know how he stands; but the ability of the student to manage his own educational career and to come reasonably near to his best capabilities are factors that will count in his final ratings.

Since standards of character, as developed by and measured by honest student work, and as revealed by evidences of the possession of thorough-going self-respect and community feeling, particularly as to ideals in the important matters of citizenship and future parenthood, are more important than all else, every student will have full opportunity to show that he is worthy and that he has the capacity and the will to manifest and develop character.

ROUTINE AND PROCEDURE

Outside of the necessary routine and procedure in the conduct of registration, class attendance, conduct of examinations, and the like, college affairs are controlled by standards which are the result of experience or which reflect a very definite public opinion and college morale. There is no honor "system," but there is a standard of honor as to honesty in college work. Matters of personal conduct are not the subject of rules and regulations, but are affairs of personal and individual responsibility. Problems of conduct and control affecting the student body or student groups are dealt with as they arise (if they are not already the subject of custom, or of student body by-laws) and usually are settled by student action.

ORGANIZATION

THE CALENDAR AND REGISTRATION

The college year is divided into the fall and spring semesters of eighteen weeks each, followed by a summer session consisting of terms of six, nine and three weeks. Students may enter at the beginning of either semester and at the beginning of either the six or the three weeks' summer term.

The Summer Session meets the needs of regular students who wish to gain credits toward the A.B. degree, of teachers in service who wish further professional training and of liberal arts students who wish to secure supplemental credit or to shorten the time for completion of work in the lower division.

Registration of students will be made September 11, 12, 13, and 14 for the fall semester, and February 5, 6, and 7 for the spring semester. Those entering as freshmen with regular admission or with the first type of provisional admission must see that the high school principal's recommendation or the high school transcript is on file before registration day. This recommendation must be made on a form furnished by the college. Freshmen with the second type of provisional admission must secure information regarding procedure from the Registrar by June 11. Those entering with advanced standing must submit transcripts of record covering high school and college work by August 20, January 22, and June 11, for admission to the Fall and Spring semesters and the Summer Session, respectively. An application for evaluation must also be filed, stating which curriculum is desired. In the case of transcripts arriving after the dates specified, persons will run the risk of being obliged to register as special students, without adequate advice concerning their programs with reference to requirements.

ADMISSION TO COLLEGE

GENERAL REQUIREMENTS

Every person admitted as a student to this college must be a resident of the United States (including the territories), must be of good moral character, of good health, and of that class of persons, who, of proper age, would be admitted to the public schools of the State without restriction. At entrance, every student must take an examination to determine his physical fitness for the teaching profession.

A candidate for admission under any of the three following types of standing must submit the names of three persons by whom he or she has been employed (including the latest employer), if the candidate has not been in attendance at school or college during the semester preceding entrance. These names should be placed on file with the Registrar at least three weeks before the date for registration.

I. Freshman Standing

Graduates of accredited public high schools of California, graduates of other schools of California, and graduates of schools of secondary grade of other States recognized by this college as equal in rank to an accredited public high school of California, who have completed a regular four-year course of study and who are recommended by the principal of the school in which such course of study was completed, may be admitted to undergraduate standing.

Candidates may be admitted by either of two methods:

1. Regular (clear) admission. High school graduates who present ten recommended units and principals' certificates of recommendation, will be granted regular admission. Graduates of three-year senior high schools must present eight recommended units earned in grades ten, eleven and twelve.

2. Provisional admission. High school graduates who present fewer than ten recommended units will be admitted provisionally, provided the applicant for admission has earned six recommended units in the final three years of high school work, at least four of which shall have been done during the final two years of high school work.

3. Applicants with less than the number of recommended high school units specified in Item 2 above, may make special application to the Faculty Committee on Provisional Admission. Such applicants should write to the Registrar for information concerning procedure by June 11.

Students admitted under Items 2 and 3 above will be restricted as to study load. At the close of the first semester in residence, a complete re-evaluation of the credentials and records of all such students will be made and their status determined.

Certificates of successful examinations before the College Entrance Examination Board will be accepted to admit candidates who can not meet the requirements of any of the above methods. The entrance examinations of the Board are held in June each year (in California,

at Berkeley, Los Angeles, San Diego, and other places). Applications for examinations must be addressed to the College Entrance Examination Board, 431 West 117th street, New York. They must be made upon a blank form to be obtained from the secretary of the Board upon request.

II. Advanced Standing

Students from other institutions of recognized collegiate rank may be admitted to advanced standing upon such terms as the Committee on Advanced Standing may deem equitable. In any case a student must have a scholarship record equal to a C average in this college. Every such candidate is required to present a duly certified statement of his college record together with a statement showing in detail the basis upon which the applicant was matriculated and the preparatory subjects for which matriculation credit was given.

Credit is given only for regular college work in institutions uniformly recognized as standard colleges, or colleges maintained primarily for the training of teachers, or professional schools in those fields in which this college grants a special credential.

Holders of California Teachers' Certificates, or holders of similar certificates recognized by the California State Board of Education, may be admitted with credit to be determined by the Committee on Advanced Standing.

N. B.—Transcripts of record from other institutions will not be returned or copies of them made.

III. Special Standing

An adult who is at least 21 years of age, who has not had the opportunity to complete a satisfactory high school course, but who is considered competent to undertake certain courses, may be admitted to special standing. Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned whenever it seems advisable. Such a student may become a candidate for graduation upon removing the high school deficiency. (Applicants will not ordinarily be admitted directly from the secondary schools to the status of special students.)

MATRICULATION RECOMMENDATIONS FOR CERTAIN CURRICULA

In planning to comply with the foregoing requirements for freshman standing, the prospective student is advised to arrange his high school program so as to enable him to enter without handicaps the work of the curriculum to which he seeks admission. Although deficiencies in certain subjects may be removed after admission to freshman standing, such removal will not only reduce the student's opportunity for elective study but may make it necessary for him to extend his college course beyond the normal period of time required for its completion.

In general preparation for a teacher-training curriculum, the prospective student should have attained proficiency in reading, spelling, handwriting, arithmetic, and the use of English.

In preparation for major work in the biological sciences and in the premedical and predental curricula, the prospective student is advised to include chemistry or physics and French or German. For a college

major in mathematics or physics, the student should include French or German, geometry, algebraic theory and trigonometry in his high school program, and for a major in chemistry he should include algebraic theory and physics or chemistry. Algebraic theory and trigonometry are recommended for a major in commerce. In his preparation for engineering curricula, the prospective student is strongly urged to lay a good foundation in the study of elementary algebra, plane geometry, algebraic theory, trigonometry, physics, chemistry, and mechanical drawing. For a major in English or a foreign language, the study of Latin is recommended.

MATRICULATION

A student is matriculated when he has satisfied all entrance requirements. The standing of all students is conditional during the first semester of residence.

REGISTRATION PROCEDURE

REGISTRATION

Registration takes place on regularly appointed days at the beginning of each semester. Faculty advisers representing every curriculum assist students in the planning of their programs, but students are urged to study the requirements of the curriculum they intend to follow and to decide upon their choice of electives before consulting their advisers. New students should not expect assistance with their programs until registration day. Upper division students, however, are given the privilege of planning their programs during a preregistration period held in the latter part of each semester, when they may hold more lengthy consultations with their advisers than on registration day. Since registration is not complete until fees have been paid, students should be careful to provide themselves with sufficient funds on registration day.

TESTS REQUIRED AT REGISTRATION TIME AND LATER

(See Calendar for dates)

1. An examination for the determination of physical fitness is required of all students at entrance. Appointments are made during registration.
2. All students entering the college are required to take the College Aptitude test, mainly for purposes of guidance and assistance. Exceptions may be made for students who register for six units of work or less, for former graduates of this college, and for graduates of approved four-year colleges.
3. The Subject A Test (English Composition) is required of all entering students. English 1A must be taken by all students whose tests indicate that they are not qualified for English 1B, even though they may not intend to take that course. No student may enroll for his third semester of attendance unless he has qualified for English 1B or is enrolled in English 1A. Exceptions may be made for students transferring credit in English from another college.
4. Passing the Fundamentals Test in reading, spelling, arithmetic and handwriting is a prerequisite for admission to upper division courses in teacher training curricula. Students should take this test upon entrance to college in order that they may have sufficient time to make up deficiencies, if any, before applying for admission to the upper division. Exceptions may be made for former graduates of this or other California State teacher training institutions who have been teachers in service.
5. All candidates for a teaching credential are required to take a speech test. Remedial work will be required of all who fail to pass the test.

LATE REGISTRATION

A new student who registers after the close of the first week of the semester is subject to a limitation of his program. A fee of \$2 must be paid for registration after the regular registration period. After the

first week of the semester, the instructor's approval must be secured for each course entered.

CHANGES IN REGISTRATION

Changes in program may be made only with the approval of the student's adviser. In addition, the instructor's approval must be secured for entering a course after the first week.

AUDITORS

Regular auditors must register in the usual way, though this may be done on the first day on which they have classes, without payment of the late fee.

FEES AND DEPOSITS (SUBJECT TO REVISION)

Fees and Deposits Payable at Time of Registration

Tuition Fees—

Resident students-----	\$6 50
Limited students (5 units or less) and auditors—resident (fee per unit)-----	2 50
*Nonresident students—1st semester-----	75 00
2d and subsequent semesters-----	37 50
Training school students-----	2 50
Late filing of program-----	2 00

Deposits—

General service (library, locker and towel deposits)-----	5 00
Deposit is for the year. New deposit required only when deposit is used up in service charges.	
Chemistry: 1A, 1B, 6A, 6B, 7, 8, 101, 102, 106A, 106B, 107, 108, 123, 124 (each course, each semester)-----	5 00
199-----	2 50
Physics: 1A, 1B, 1C, 1D, 3A, 3B, 107A, 107B-----	2 00
Surveying: 1A, 1B-----	2 00

Local Organizations—

Student Body Fee-----	5 00
Associated Men Students or Womens' Governmental Association Fee-----	50

Fees Payable When Service Is Rendered

College Aptitude Test-----	\$2 00
English—Subject A Test-----	25
Fundamentals Test-----	50
Placement Office-----	2 00
Placement Office—copy of papers—3 for-----	25
Diploma (parchment)-----	80
Evaluation of Record for Advanced Standing-----	2 00
Duplicate Library Card-----	10
Transcript of Record-----	1 00
Carbon copy of Transcript of Record-----	25
Special Examination-----	2 00

* See page 24 for definition of residence for fee-paying purposes.

Fees Payable During Seventh Week of Each Semester

General Service (library, reader, mimeograph, health)-----	\$2 50
Towel -----	1 00
Locker (key or combination padlock—each issue)-----	25
Parking -----	50
Art: 61A, 61B, 152A, 52A-----	1 00
11B -----	2 00
115 -----	4 00
Biology: 10A, 10B-----	1 50
Botany: 2A, 2B, 5, 106-----	1 50
Chemistry: 1A, 1B, 6A, 6B, 7, 8, 106A, 106B, 107, 108-----	7 50
101, 102-----	2 50
123, 124 (fee per unit)-----	2 50
199 (fee per unit)-----	1 00
Education 116 (fee per unit)-----	75
English: 4A, 4B, 10, 52A, 52B, 101, 110, 130A, 130B-----	50
Geography: 1, 2, 3, 116, 117, 118, 121, 124, 141-----	50
Geology: 1A, 1B-----	1 00
History: 8A, 8B, 121A, 121B, 145A, 145B, 151A, 151B, 161, 163, 171A, 171B-----	1 00
Music: 2A, 2B-----	50
Physics: 1A, 1B, 1C, 1D, 3A, 3B-----	2 50
Political Science: 1A, 1B, 101, 111, 113-----	1 00
Psychology: 102-----	50
Speech Arts: 20-----	2 00
Zoology: 1A, 1B-----	3 50
100 -----	2 50
113B, 121-----	1 50

LIVING EXPENSES

Since no dormitories are maintained for the college campus, it is impossible to supervise the living quarters of college students. Students are required to keep the office of the Dean informed of their places of residence if not living with parent or guardian, and every effort is made to assist them in choosing suitable living accommodations.

The Dean of Women will furnish upon request addresses of homes in which board and room may be secured; also lists of apartment houses and single rooms which may be patronized by students.

Board and room, two meals per day, may be procured at from \$30 to \$35 per month. Single rooms with kitchen privileges at from \$10 to \$20 per month are also available. While at present there are very few accommodations in the immediate vicinity of the college, all of those listed are within reasonable distance and easily accessible to the college.

SELF HELP AND LOAN FUND

A limited amount of clerical work in offices and library may be offered from time to time, but ordinarily is not sufficiently remunerative to reduce expenses materially. An employment service is conducted by an administrative committee, members of which are the Dean of Women, the Dean of Men and the Dean of Liberal Arts.

The San Diego State College Loan Foundation is administered by the Alumni Association for the purpose of helping worthy students with

insufficient financial resources to continue their education. Both long and short term loans are available to students who have been in attendance at the college for at least one year. Loan funds are also administered by the Associated Women Students, the City Teachers' Association, the Scottish Rite Woman's Club, and the Entre Nous Club.

SCHOLARSHIPS AND PRIZES

Cap and Gown, Senior Women's Honorary Society, awards a fifty-dollar scholarship annually. Any upper division woman student with a grade-point average of at least 2.01 is eligible to apply. Application is made to the Dean of Women in May of the year preceding awarding of scholarship.

The College Y. W. C. A. has established a scholarship fund to aid women students. Both scholarship and need of applicants are considered in making the award. Application is made to the Dean of Women.

The Security Trust & Savings Bank of San Diego has established an annual award yielding a first prize of \$25, a second prize of \$15, and a third prize of \$10 to undergraduate students submitting the best papers on a subject of current interest in the field of economics.

ADMINISTRATIVE REGULATIONS

OFFICERS FOR CONSULTATION

Concerning the housing and living arrangements of students, dates and arrangements for all student social affairs, personal advice (women)—The Dean of Women.

Concerning matters of student-body policy, personal advice (men), etc.—The Dean of Men.

Concerning supervision of practice teaching, conference, credential requirements, etc.—The Dean of Education.

Concerning matriculation, program of studies and teaching, credits, etc.—The Registrar and the Board of Student Advisers.

Concerning health and physical condition, college athletics, rowing, etc.—The Director of Physical Education (women); The Director of Physical Education (men).

Concerning relations to the training school, to pupils, routine, etc.—The Principal of the Training School.

Concerning student-body affairs—The executive officers of the student body; the Dean of Liberal Arts; the Dean of Women; the Dean of Men.

Concerning Appointments to teaching positions—The Placement Secretary.

Concerning use of the buildings—The Superintendent of Buildings.

RESIDENCE

For fee paying purposes, residence is defined as "the place where one remains when not called elsewhere for labor or other special or temporary purpose, and to which he returns in seasons of repose. There can be only one residence. The residence of the father during his life and after his death, the residence of the mother while she remains unmarried, is the residence of the unmarried minor child. The residence of the husband is the residence of the wife." (Sec. 52, Political Code of the State of California.)

CLASSIFICATION

Regular students are those students who have complied with the requirements of admission and are registered in 6 or more units of work.

Limited students are partial course students who, for adequate reasons, have been permitted to register for less than 6 units of work.

Special students are mature students who have not satisfied all entrance requirements and who are registered for such courses as their ability and preparation qualify them to pursue. Special students may also be limited students.

For convenience in administration, students who have completed 0 to 29 units of work are classified as freshmen; those who have completed

30 to 59 units, as sophomores; those who have completed 60 to 89 units, as juniors; and those who have completed 90 or more units, as seniors.

UNITS OF WORK AND STUDY-LISTS LIMITS

A unit of credit represents approximately, for the average student, three hours of actual work per week through one semester—one hour of lecture or recitation, together with two hours of preparation; or three hours of field or laboratory work.

Sixteen units, in addition to physical education ($\frac{1}{2}$ unit), constitute a normal semester's program for all students. An entering freshman, however, is allowed to enroll for a maximum of 17 units, and all other students for a maximum of 18 units, provided such additional enrollment seems to the adviser necessary or advisable in order to round out the study program. Ordinarily, only 16 units, in addition to physical education, will be credited toward graduation; except that, after a student's first semester at the college, a program of 17 units, in addition to physical education, will be credited provided the student was registered for at least 12 units in the preceding semester and attained an average of not less than 1.5 grade points; 18 units will be credited provided the student attained an average of not less than 2.0 grade points. Any course in which a student received a passing grade may be used in the satisfaction of course requirements, even though such course is in excess of the units credited for graduation. Credit for a program that does not conform to the above regulations can be obtained only by permission of the Scholarship Committee, upon petition. No student will be allowed to register for less than 12 units without the approval of the academic dean of his department.

SCHOLARSHIP GRADES AND GRADE POINTS

The following grades are used in reporting the standing of students at the end of each semester: A, excellent; B, good; C, fair; D, passed; E, conditioned; F, failed; I, incomplete.

Grade points are assigned as follows: Grade A, 3 points per unit; B, 2 points per unit; C, 1 point per unit; D, no points; E, minus 1 point per unit; F, minus 1 point per unit.

The grade E is used to record work which is of low order but which may be made passable. If by the close of the next semester the work has been satisfactorily completed the grade E is changed to a D; otherwise it is changed automatically to an F. The grade I is used to record work which may be of higher order but which is incomplete for some acceptable reason. Ordinarily to change an I to another grade the work must be completed within a year. In case of failure in a course, no credit is given until the course has been repeated.

To qualify for a certificate in any curriculum or for a diploma of graduation or for a transcript of record with recommendation, in transferring to another collegiate institution, a student must have earned as many grade points as the number of units he has attempted; that is, he must have attained an average of at least C grade in all work undertaken at the college. On a transcript of record for a student whose scholarship is below a C average, the honorable dismissal shall be qualified by the phrase "except for scholarship."

ELIGIBILITY FOR PRACTICE TEACHING

No student shall be eligible for practice teaching (Education 116) who has not completed 75 units, passed the Fundamentals Test or its equivalent, and whose entire record, and also his record for the preceding semester, does not average C grade.

PROBATION AND DISQUALIFICATION

A scholarship record below an average of grade D per unit of work undertaken in any single semester disqualifies a student for further attendance at the college.

Any student whose scholarship record shows a cumulative deficit of 1 or more grade points for all work undertaken in the college to the close of any semester will be placed on probation.

A student whose study lists have averaged less than 12 units per semester will be placed on probation if his cumulative deficit equals or exceeds the average number of units carried per semester.

Any probational student whose scholarship falls below an average grade of C in any single semester is disqualified for further attendance at the college. Probationary status may be continued until the cumulative grade-point deficit be reduced, in the case of a regular student to an amount less than 12 and, in case of a limited student, to an amount less than the average number of units carried per semester.

A disqualified student may be reinstated after an interval of one semester for reasons satisfactory to the Executive Committee. All applications for reinstatement must be in writing.

SPECIAL EXAMINATIONS

Special examinations are classified as: (1) matriculation examinations (2) final examinations taken at other than the regular time; (3) examinations taken for the purpose of removing conditions; (4) examination for advanced standing.

For every special examination given, the student shall pay a fee of two dollars at the business office. The instructor shall give such examination only on the presentation by the student of a receipt showing that the fee has been paid.

EXAMINATIONS AT SPECIAL TIMES

No final examinations shall be given to individual students before the regular final. Any student who finds it impossible to take a final examination on the date scheduled must make arrangements with the instructor to have an incomplete grade reported and must take the deferred final examination not later than the end of the second semester following that in which the incomplete was given. No exceptions shall be made to this rule without the approval of the dean of the department and the instructor concerned.

CONDUCT OF EXAMINATIONS

All final examinations shall be written in Blue Books or other forms which shall be furnished by the college and distributed by the instructor.

at the beginning of the examination period. No books or papers of any kind shall be brought into the examination room, except by special order of the instructor.

WITHDRAWALS FROM CLASS

A student may not withdraw from class without the permission of the proper study-lists officer on a "change of registration card," which must be filed in the Registrar's Office. An unauthorized withdrawal from a class will result in a mark of failure on the student's record. A withdrawal after the third week of a semester except for reasons beyond the student's control is interpreted as a failure in the course. A student who is obliged on account of ill health to withdraw completely from college after the third week may, upon presentation of a physician's certificate, have his courses dropped from his record without penalty if he has maintained a C average in all his studies up to the beginning of the current semester. Any student who withdraws completely from college for any other cause after the third week may have those courses in which his grade was C or better at the time of his withdrawal dropped from his record without penalty, but a grade of F (failure) will be recorded for all courses in which his work was below C at that time.

PLACEMENT SERVICE

A Placement Office is maintained by the college as a clearing house of employment information for superintendents and employing boards and students of the college. While the purpose of this office is to assist candidates in securing positions, it is the primary aim of the office to bring about a better adjustment of the teacher to the community. A complete record of college attainments is kept in a confidential file for each registrant of the office and this material is made available to employers. Recommendations are based on records which indicate every item in the candidate's equipment, and particular care is taken to select in each case the candidate who can best meet the requirements of the position. A fee of \$2 is payable each year in which active service is desired.

STUDENT LIFE

ORGANIZATIONS

Student affairs, and organizations to foster them, are many and varied but are well coordinated through the central student body organization The Associated Students. The following list indicates the major activities:

Art Guild, College Orchestra, El Club Azteca, Engineering Club, Four Arts Guild, Gamma Psi (English); International Relations Club, Men's Glee Club, Mu Gamma (Music), Philharmonia, Psychology Club, Skull and Dagger, Treble Clef Club.

National Honor Societies: Delta Kappa (Chemistry), Kappa Delta Pi (Education), Pi Gamma Mu (Social Science).

Men: Associated Men Students, Blue Key (national), Oceotl (lower division), College Band, Physical Education Club, Alpha Phi Omega (national), Delta Pi Beta, Epsilon Eta, Eta Omega Delta, Kappa Phi Sigma, Omega Xi, Phi Lambda Xi, Sigma Lambda, Tau Delta Chi.

Women: Women's Governmental Association, Cap and Gown, College Y. W. C. A., Women's Athletic Association, Alpha Phi Delta, Alpha Sigma Alpha, Delta Chi Phi, Epsilon Pi Theta, Gamma Phi Zeta, Kappa Theta, Phi Kappa Gamma, Phi Sigma Nu, Shen Yo, Sigma Pi Theta, Tau Zeta Rho, Theta Chi.

Men's Athletics: Football, baseball, basket ball, track, swimming, tennis, cross country, wrestling, fencing, and golf.

Women's Athletics: Rowing, swimming, tennis, golf, horseback riding, and seasonal sports.

Publications: The Aztec (weekly), Del Sudoeste (year book), and El Palenque (quarterly).

ALUMNI ASSOCIATION

The college has an active alumni association. Since its reorganization in March, 1929, the Association has steadily gained in membership. The annual Homecoming is an important event each year; other meetings take place on dates of important athletic contests. The Association also sponsors the organization of Aztec clubs in various communities. Information concerning the Association may be obtained by writing the secretary at the college.

DEGREE REQUIREMENTS

GENERAL REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS IN THE CURRICULA WITH TEACHING CREDENTIALS

Total Units, Length of Time, and Residence

A minimum of 124 units of college work is required, representing a four-year course. Students who are planning to secure California teaching credentials through graduation from this college are urged to follow the curriculum pattern for the credential or credentials which they wish to earn, throughout the entire four years. Not less than 54 units must be earned in the junior and senior years; at least 30 units of work at this college; twenty-four of these residence units must be taken with the rank of senior, at least twelve of which must be taken in the fall or spring semester of the final year before graduation.¹

Admission to Upper Division Teacher Training

Students are not admitted to upper division status in teacher training on the basis of merely having completed the lower division work. Application for admission to upper division work should be made during the final semester of the sophomore year and a committee of the faculty, appointed for this purpose, will review the candidate's records and make recommendations regarding admission. In the main, this committee will be guided by the following factors:

1. The completion of the lower division work of a given teacher training curriculum including all the preliminary tests required of teacher training candidates with a scholastic record of C or better.
2. Physical fitness as shown by a prescribed examination given by a college physician.
3. Fitness for teaching, to be based on recommendations by members of the faculty and on the judgment of the committee as a result of personal interviews with the candidate.

¹ Graduates of this college and teachers in service in California have until the summer of 1935 to complete the requirement without attendance during the academic year. Graduates from the three-year (ninety-six unit) course, which was in force from 1928 to 1930, may earn the requisite number of units to make a total of one hundred twenty-four by summer session and extension work, provided they attend for two consecutive summers of nine weeks each immediately before graduation, or one summer session of nine weeks with six units of extension work during the same year, taken at this college or in courses given by the University of California by members of the San Diego State Teachers College faculty. From eight to ten units must be taken during these summers in special "residential degree" courses. Graduates from less than the three-year curriculum and other teachers in service in California will be granted the privilege of the arrangement of two summer sessions with the additional qualifications that all lower division requirements must be satisfied before they are accepted as candidates and that their subject matter offering must be made to conform to present standards. Complete information concerning details may be obtained by writing to the Registrar.

Upper Division Course Requirements

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under heading Courses of Instruction); junior standing requires 60 units of credit. Introductory courses open to first semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Advanced Standing in Teacher Training

A maximum of 18 units in courses in education will be credited toward degree requirements in case such work was taken more than 5 years before entering upon the degree curriculum at this college (date of first work taken after an evaluation of record has been made, for students entering with advanced standing). After an interval of 5 years subsequent to last attendance, evaluations are subject to revision with respect to deduction of credit in education courses and such new requirements as may have been put into effect.

Students formerly in attendance will not be considered to be working in the degree curriculum until an evaluation and statement of credit has been secured from the registrar's office. All courses taken either at this college or elsewhere must be approved by an official adviser or the registrar (for courses taken elsewhere) in order to be credited toward meeting degree requirements.

Summary of Basic Requirements, Common to All Curricula in This Group

Education	21 units
Lower division courses in English.....	6 units
Lower division courses in natural science.....	12 units
Physical Education activity.....	2 units
Political Science 101.....	2 units
Psychology 1A	3 units
Lower division courses in social science.....	12 units

Explanation of the basic requirements:

In the different curricula leading to the various teaching credentials specific courses are required in the various subjects listed in the summary which may total more than the minimum given in the summary. In addition, the following information must be taken into consideration in connection with fulfilling the requirements in each subject.

English

Courses in journalism or in speech arts are not accepted in satisfying this requirement. The following courses or their equivalents are required: English 1A, 1B, and 2A.

Natural Science

The electives in natural science may be reduced to a minimum of 6 units if the student presents acceptable grades from the high school in natural science in laboratory courses offered exclusively for the third or fourth year students. In general, each year's work of high school science will

thus reduce the requirements by 3 units of credit. No college credit will be given for the high school work; merely an exemption of the requirements will be permitted. The college courses which may be used in satisfaction of this requirement are: Agriculture 20, Astronomy 1, 5, 11; Biology 10A-10B, Botany 2A-2B, 4, 5, 7; Chemistry, 1A-1B, 2A, 3A-6B, 7-8; Geography 1, 3; Geology 1A, 1B; Physics 1A-1B, 1C-1D, 2A-2B, 3A-3B; Zoology 1A-1B.

Political Science 101

Political Science 113 or History 171A-171B or History 173A-173B will be accepted as substitutes for this requirement.

Social Science

Courses in the following departments may be used in satisfaction of this requirement: Anthropology, Economics (except 14A-14B and 18A-8B), Geography (except 1 and 3), History, Political Science, Social Economics.

Major and Minor Requirements

For the elementary school credential, two academic teaching minors are required; for the junior high school credential, or for both the elementary and junior high school credentials together, an academic teaching major and an academic teaching minor are required. An academic teaching major consists of 24 units in a field other than education, twelve of which must be in the upper division. An academic teaching minor consists of 12 units in a field other than education, six of which must be in the upper division. Academic teaching majors and minors may be established in the following fields: English, foreign languages, general science, mathematics, and social sciences (economics, geography, history, political science, social economics). Academic teaching minors may also be established in art, music, and physical education.

Candidates for the academic teaching major in the field of English will be expected to show credit in English 1A, 1B and 2A with six units of electives in the lower division; English 130A and 130B and six units of electives in the upper division. Candidates for the academic teaching minor in this field will be expected to show credit in English 1A, 1B and three units elected from 2A, 4A, 4B, 52A, 52B in the lower division; three units elected from English 130A or 130B, the remaining three units elected from English 101, 117, 130A, or 130B in the upper division. Candidates for the academic teaching major in the field of general science must meet the general requirement of twelve units of natural science in the lower division including Biology 10A-10B, unless taken in high school. The remaining units to complete the major must be chosen so as to include a year course in a biological science unless Biology 10A-10B is taken in college, a year course in physics and a concentration in twelve units, at least six of which are upper division, in one major subject (botany, chemistry, physics, zoology).

Candidates for an academic teaching major in the field of the social sciences must meet the general requirements of twelve units of social science in the lower division including Geography 2 and Social Economics. The remaining eighteen units must be chosen so as to include a year

course of six units in history in either the lower or upper division and a concentration of twelve units, at least six of which are upper division in one major subject (economics, geography, history, political science).

Combinations of Credentials

In the case of students seeking more than one teaching credential, the curriculum for each credential must be completed in full, with only such exceptions as are indicated in the requirements.

Scholarship

The number of grade points acquired in this college by the candidate for a degree must be equal to the number of units attempted. (See page 25 for an explanation of scholarship grades and grade points.)

Preparation for Graduate Work

Students who take the A.B. degree with only a special credential and who contemplate doing graduate work for a master's degree in an academic field at another institution of higher learning, will find it advantageous to use their electives to lay a foundation for that work. A student who plans to do graduate work in the field of his academic teaching major is advised so to arrange his electives as to complete the presecondary major to avoid the necessity of making up an undergraduate deficiency.

CURRICULA LEADING TO TEACHING CREDENTIALS

A.B. Degree With Elementary School Credential

FRESHMAN YEAR

First Semester—	Units
Biology 10A, ¹ General (unless taken in high school)-----	3
Geography 1, Elements (Natural Science)-----	3
Physical Education 1A or 36A-----	$\frac{1}{2}$
Art 6A, Structure-----	2
English 1A or 1B, Freshman English-----	1 or 3

Second Semester—

Biology 10B ¹ General (unless taken in high school)-----	3
Geography 2, Regions (Social Science)-----	3
Physical Education 1B or 36B-----	$\frac{1}{2}$
Music 1A, Music Reading and Ear-training-----	2
English 1B, Freshman English or 2A, Sophomore English--	3

Either Semester—

Social Economics 10, Foundations of Civilization-----	3
Electives to meet requirements in Natural Science, Social Science and majors and minors ^{2, 3} -----	8 or 6

—
32

SOPHOMORE YEAR

First Semester—	Units
Physical Education 1C or 37, Game and Rhythmic Activities	$\frac{1}{2}$
English 2A, Sophomore English (unless taken in freshman year) -----	3

Second Semester—

Physical Education 1D or 38A-----	$\frac{1}{2}$
Physical Education 53, Physical Education in the Elementary School, or Physical Education 54, Administration of Phys- ical Education -----	2

Either Semester—

Psychology 1A, General-----	3
Art 61A, Elementary Crafts-----	2
Art 61B, Elementary Crafts-----	2
Electives to meet requirements in Natural Science, Social Science and majors and minors ^{2, 3, 4} -----	19-22

—
32

¹ Possible substitutions for the requirement in Biology 10A-10B.

1. Botany 2A-2B and Zoology 1A-1B—16 units.

2. High school Botany and Zoology 1A-1B.

3. High school Zoology and Botany 2A-2B.

4. High school Botany and high school Zoology.

² See Summary of Basic Requirements for total requirement in English, Natural Science, and Social Science.

³ Unless minor is English, Natural Science or Social Science.

⁴ If 6 units in minor taken in freshman year, none needed in sophomore year.

JUNIOR YEAR

First Semester—	Units
Psychology 102, Genetic-----	3
Education 147, Education Practicum—Lower Levels-----	7
Second Semester—	
Education 108, Educational Measurements-----	3
Education 148, Education Practicum—Upper Levels-----	7
Either Semester—	
Physical Education 151, Health Education-----	2
Political Science 101, American Institutions-----	2
Electives to meet needs of majors and minors-----	6
	30

SENIOR YEAR

First Semester—	
Education 116, Practice Teaching ¹ -----	6 or 7½
Either Semester	
Education 106, ² Philosophy of Education-----	3
Electives including two minors ³ (for the year)-----	21 or 19½
	30

SUMMARY

Art 6A, 61A, 61B-----	6
Education 106, 108, 116, 147, 148-----	26 or 27½
English-----	6 or 7
Music 1A-----	2
Natural Science (incl. Biology 10A-10B and Geography 1)---	12
Physical Education 1A-B-C-D or 36A-36B, 37, 38A; 53; 151--	6
Political Science 101-----	2
Psychology 1A, 102-----	6
Social Science (incl. Social Economics 10 and Geography 2)---	12
Electives, including two academic teaching minors-----	46 or 43½
	124

¹ Candidates for the elementary school credential in combination with any other type of credential are required to do not less than 6 units of practice teaching in the elementary school.

² Not required if junior high school or special credential is earned at the same time.

³ If 6 units in minor taken in junior year, none needed in senior year.

A.B. Degree With Junior High School Credential

FRESHMAN YEAR

First Semester—	Units
Biology 10A, ¹ General (unless taken in high school)-----	3
Geography 1, Elements (Natural Science)-----	3
Physical Education 1A or 36A-----	$\frac{1}{2}$
English 1A or 1B-----	1 or 3
Second Semester—	
Biology 10B, ¹ General (unless taken in high school)-----	3
Geography 2, Regions (Social Science)-----	3
Physical Education 1B or 36B-----	$\frac{1}{2}$
English 1B or 2A ² -----	3
Either Semester—	
Social Economics 10, Foundations of Civilization-----	3
Electives, ³ including major and minor ⁴ (for the year)-----	10 or 12
	32

SOPHOMORE YEAR

First Semester—	
English 2A, Sophomore English (unless taken in freshman year)	3
Psychology 1A, General-----	3
Physical Education 1C or 38A-----	$\frac{1}{2}$
Second Semester—	
Physical Education 1D or 38B-----	$\frac{1}{2}$
Either Semesters—	
Electives, ³ including major and minor ⁵ (for the year)-----	25-28
	32

JUNIOR YEAR

First Semester—	
Education 125 Elementary School Curriculum-----	3
Political Science 101, American Institutions-----	2
Psychology 102, Genetic-----	3
Education 108, Educational Measurements-----	3
Second Semester—	
Education 116, Practice Teaching-----	3

¹ Possible substitutions for the requirements in Biology 10A-10B:

1. Botany 2A-2B and Zoology 1A-1B—16 units.
2. High school Botany and Zoology 1A-1B.
3. High School Zoology and Botany 2A-2B.
4. High School Botany and high school Zoology.

² Depending on result of Subject A test.

³ See Summary of Basic Requirements for total requirement in English, Natural Science, and Social Science.

⁴ Unless major or minor is English, Natural Science or Social Science.

⁵ If 6 units in minor taken in freshman year, none needed in sophomore year.

Either Semester—	Units
Curriculum in Field of Academic Major-----	2
Physical Education 151, Health Education-----	2
Electives, including major and minor (for the year)-----	12
	30

SENIOR YEAR

First Semester—	
Education 116, Practice teaching-----	3

Second Semester—	
Education 121, Principles of Secondary Education-----	3

Either Semester—	
Education, elective -----	3
Electives, including major and minor ¹ (for the year)-----	21
	30

SUMMARY

Education 108, 116, 121, 125, Curriculum in Field of Academic Major, and elective in Education-----	20
English -----	6 or 7
Natural Science (incl. Biology 10A-10B and Geography 1)-----	12
Physical Education 1A-B-C-D or 36A-36B, 38A-38B; 151-----	4
Political Science 101-----	2
Psychology 1A, 102-----	6
Social Science (incl. Social Economics 10 and Geography 2) --	12
Electives, including academic teaching major and minor-----	62 or 61
	124

¹ If 6 units in minor taken in junior year, none needed in senior year.

A.B. Degree With Special Credential in Art

This course leads to the A.B. degree and to the Special Credential in Art which entitles the holder to teach art in senior high, junior high, and elementary schools.

LOWER DIVISION

	Units
Art 6A-6B, Structure.....	4
Art 61A-61B, Elementary Crafts.....	4
Education 19, Art in the Elementary School.....	2
English 1A, 1B, 2A, Freshman and Sophomore English.....	6 or 7
†Natural Science.....	12
Physical Education 1A-1B, 1C-1D (men) ; 36A-36B, 38A-38B (women)	2
Psychology 1A, General.....	3
†Social Science, incl. Social Econ. 10, Foundations of Civilization	12
Electives, including additional Art for major.....	18-19
	64

UPPER DIVISION

Education 116, Practice Teaching (4 units in special field) ..	6
Education 119, Art in the Junior High School.....	2
Education 121, Principles of Secondary Education.....	3
Education 125, Elementary School Curriculum.....	3
Education electives (suggested: Education 106 or 108 or 130) ..	3
Political Science 101, American Institutions (or substitute) ..	2
Electives, including additional courses in Art.....	41
	60

SUMMARY

Art major	50
Education	19
English	6 or 7
Natural Science.....	12
Physical Education.....	2
Political Science 101, American Institutions.....	2
Psychology	3
Social Science (including Soc. Econ. 10)	12
Electives	17-18
	124

† See Summary of Basic Requirements.

A.B. Degree With Special Credential in Commerce

This course leads to the A.B. degree and to the Special Credential in Commerce, which entitles the holder to teach commercial subjects in senior high and junior high schools.

In addition to the following academic requirements, satisfactory evidence of one-half year, or 1000 hours of approved experience in the field must be submitted.

LOWER DIVISION

	Units
Economics 1A-1B, Principles of-----	6
Economics 11, Economic History of the United States-----	3
Economics 14A-14B, Accounting-----	8
Economics 18A-18B, Commercial Law-----	6
English 1A, 1B, 2A, Freshman and Sophomore English-----	6 or 7
Geography 1, Elements (Natural Science)-----	3
Geography 2, Regions (Social Science)-----	3
Mathematics 2, Mathematics of Investment-----	3
† Natural Science -----	9
Physical Education 1A-1B-1C-1D (men); 36A-36B-38A-38B (women) -----	2
Psychology 1A, General-----	3
Secretarial Training A, Business Mathematics-----	1
Secretarial Training 3A, Office Methods and Appliances-----	3
Social Economics 10, Foundations of Civilization-----	3
Elective -----	5-6
	65

UPPER DIVISION

Economics 121, Business Administration-----	3
Economics 140, Statistical Methods-----	3
Economics 160A-160B, Advanced Accounting-----	6
Economics 161, Cost Accounting-----	3
Economics 163, Machine Accounting-----	3
Education S21, Penmanship Methods (to be taken in Sum- mer Session) -----	2
Education 116, Practice Teaching-----	6
Education 121, Principles of Secondary Education-----	3
Education 163, Stenography-----	2
Education 164, Bookkeeping-----	2
Education 165, Typewriting-----	2
Education, Elective (Educational Psychology recommended) --	3
Geography 141, Economic Geography-----	3
Political Science 101, American Institutions-----	2
Secretarial Training 1A-1B, Typewriting -----	6
Secretarial Training 5A-5B, Stenography -----	10
Elective -----	1
	60

† See Summary for Basic Requirements.

SUMMARY

	Units
Economics -----	41
Education -----	20
English -----	6 or 7
Geography -----	9
Mathematics -----	3
Natural Science (in addition to Geography 1) -----	9
Physical Education -----	2
Political Science 101, American Institutions -----	2
Psychology -----	3
Secretarial Training -----	20
Social Economics 10—Foundations of Civilization -----	3
Elective -----	6-7
	125

A.B. Degree With Special Credential in Music**

This course leads to the A.B. degree with a Special Credential in Music entitling the holder to teach music in senior high, junior high, and elementary schools.

	Units
Education 17, Music in the Elementary School-----	2
English 1A, 1B, 2A, Freshman and Sophomore English-----	6 or 7
*Music, Applied-----	18
Music 1A-1B, 1C-1D, or 1B, 1C, 1D, 1E, Music Reading and Ear Training-----	8
Music 2A-2B, Appreciation and History-----	4
Music 4A-4B, Elementary Harmony-----	6
Music 11, or 12, or 20-----	2
‡Natural Science-----	12
Physical Education 1A-1B, 1C-1D (men) ; 36A-36B, 38A-38B (women)-----	2
Psychology 1A, General (sophomore year)-----	3
‡Social Science, incl. Soc. Econ. 10, Foundations of Civilization	12

UPPER DIVISION COURSES

Education 116, Practice Teaching (at least 4 units in Music)	9
Education 121, Principles of Secondary Education-----	3
Education 127, Music in the Secondary School-----	2
Education 145, Org. and Adm. of Music Education-----	2
Music 103A-103B, Appreciation and History-----	2
Music 105A-105B, Advanced Harmony-----	6
Music 107A-107B, Conducting-----	2
Music 108, Instrumentation-----	2

* Applied Music to be distributed as follows :

Orchestral instrument(s) (Including at least one year of Orchestra (if qualified) and/or Instrumental Ensemble)-----	6
**‡‡ Piano-----	6
Voice-----	6

(Applied Music credits, 1½ units per semester, for not less than one lesson per week, with six hours practice per week, totaling at least ten hours instruction and one hundred hours practice per semester. Applied Music is taken under outside private teachers, subject to the approval and supervision of the music department of the college, which determines credit and grades by examination. Upper division credit not allowed for beginning work in Applied Music.)

‡ See Summary of Basic Requirements.

‡‡ Minimum attainment for completion of Piano Requirement in Music curriculum is the ability to play accompaniments such as are found in the Teachers Manuals of the Progressive Music Series, Books Three and Four.

** Applicants for admission to the Music curriculum will be required to take an entrance examination in Piano, to determine their ability to play satisfactorily hymns and folk songs of the type found in the Golden Book of Favorite Songs. Those not able to meet this requirement must study piano without credit until able to pass such an examination. They may also take examinations in Fundamentals of Music, and Harmony, for advanced standing in these subjects.

UPPER DIVISION COURSES—Continued

	Units
Music 111, or 112, or 120.....	2
Political Science 101, American Institutions.....	2
Electives	16-17
	124

SUMMARY

Education	18
English	6 or 7
Music major.....	52
Natural Science.....	12
Physical Education.....	2
Political Science 101, American Institutions.....	2
Psychology	3
Social Science (including Soc. Econ. 10).....	12
Electives	16-17
	124

A.B. Degree With Special Credential in Physical Education

This course leads to the A.B. degree and to the Special Credential in Physical Education which entitles the holder to teach physical education in senior high, junior high, and elementary schools.

MEN

LOWER DIVISION

	Units
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A, General-----	4
English 1A, 1B, 2A, Freshman and Sophomore English-----	6 or 7
Hygiene 1-----	2
†Natural Science-----	2 or 4
Physical Education:	
1A-1B, 1C-1D-----	2
6A, Tennis-----	$\frac{1}{2}$
54, Administration-----	2
62A, 62B, Gymnastic Activities-----	4
*Sports and Athletics-----	3
Psychology 1A, General (sophomore year)-----	3
Red Cross Swimming Test-----	$\frac{1}{2}$
†Social Science, incl. Soc. Econ. 10 and 50-----	12
Speech Arts 1A, Elements of Public Speaking-----	3
Zoology 1B, General-----	4
Electives-----	13-14
	64

UPPER DIVISION

Education 116, Practice Teaching-----	6
Education 121, Principles of Secondary Education-----	3
Education 125, Elementary School Curriculum-----	3
Education, elective-----	6
Physical Education:	
101. Emergencies-----	1
151, Health Education-----	2
155, Applied Anatomy-----	2
156A-156B, Sports Methods-----	4
166, Technique of Officiating-----	1
169, Technique of Teaching Activities-----	3
171, Community Recreation-----	2
172, Principles-----	2
180, Tests and Measurements-----	2
*Sports and Athletics-----	3

† See Summary of Basic Requirements.

* Men majoring in Physical Education must actively participate in three sports each year.

MEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions-----	2
Psychology 102, Genetic (first semester, junior year)-----	3
Zoology 100, Embryology-----	3
or	
Zoology 114A, Genetics-----	2
or	
Zoology 121, Entomology-----	3
Electives -----	9-10

60

SUMMARY

Education -----	18
English -----	6 or 7
Speech Arts 1A-----	3
Natural Science (including Biol. 10A-10B or substitute and Zoology 1B)-----	12
Physical Education major-----	26
Political Science 101, American Institutions-----	2
Psychology -----	6
Social Science(including Soc. Econ. 10 and 50)-----	12
Zoology (upper division)-----	2 or 3
Electives -----	35-37

124

WOMEN

LOWER DIVISION

	Units
Biology 10A-10B, General (unless taken in high school)-----	6
or	
Zoology 1A, General-----	4
English 1A, 1B, 2A, Freshman and Sophomore English-----	6 or 7
Hygiene 2, Personal and Civic-----	2
Natural Science -----	2-4
Physical Education:	
36A, Rhythmic Activities, Group Games, Stunts-----	$\frac{1}{2}$
36B, Athletic Games-----	$\frac{1}{2}$
37, Game and Rhythmic Activities-----	$\frac{1}{2}$
38A, Recreational Activities-----	$\frac{1}{2}$
53, Physical Education in the Elementary School-----	2
55A-55B, Swimming-----	1
56, Tennis -----	$\frac{1}{2}$
57, Golf-----	$\frac{1}{2}$
58, Rowing-----	0
Psychology 1A, General-----	3
Social Economics 50, General Sociology-----	3
Social Science, incl. Soc. Econ. 10, Foundations of Civilization--	9
Speech Arts-----	3
Zoology 1B-----	4
Electives -----	19-20
	64

UPPER DIVISION

Education 108, Educational Measurements-----	3
Education 116, Practice Teaching-----	6
Education 121, Principles of Secondary Education-----	3
Education 125, Elementary School Curriculum-----	3
Education 140, Educational Statistics-----	
or	
Education 106, Philosophy-----	3
Physical Education:	
102, Emergency and Safety Programs-----	1
151, Health Education-----	2
154, Applied Anatomy-----	2
157A-157B, Sports Methods-----	4
158, Stunts and Tumbling-----	1
160, Formalized Activities-----	2
161, Folk Dancing-----	2
164, Dancing -----	2
169, Technique of Teaching Activities-----	3
170, Recreational Leadership-----	2
173, Principles -----	2
153, Administration of Secondary Physical Education-----	2
175, Current Problems-----	2
177, Individual Program Adaptations-----	2

WOMEN—Continued

UPPER DIVISION—Continued

	Units
Political Science 101, American Institutions-----	2
Psychology 102, Genetic (first semester, junior year)-----	3
Zoology 100, Embryology-----	
or	
Zoology 106, Comparative Anatomy of the Vertebrates-----	
or	
Zoology 121, Entomology-----	3
Electives -----	5
	60

SUMMARY

Education -----	18
English -----	6 or 7
Hygiene -----	2
Speech arts-----	3
Natural Science (including Biol. 10A-10B or substitute, and Zoology 1B)-----	12
Physical Education major-----	35½
Political Science 101, American Institutions-----	2
Psychology -----	6
Social Science (including Social Economics 10 and 50)-----	12
Zoology (upper division)-----	3
Electives -----	23½-24½
	124

DIPLOMA OF GRADUATION

A diploma of graduation carrying with it any of the credentials the college is authorized to grant or any combination of them may be granted to the holder of a bachelor's degree from an accredited college, upon the completion of a minimum of 24 units. Ordinarily at least one semester of residence during the academic year is required subsequent to securing the degree; the remainder of the work may be in summer session or, in the case of students who had attended the college prior to attaining the degree elsewhere, in credit earned as an upper division student. The candidate for a diploma must offer the equivalent of all of the requirements listed in the curriculum with the A.B. degree with the credential or credentials sought.

ADMINISTRATION AND SUPERVISION CREDENTIALS

The State Board of Education has authorized this college to make recommendations for the issuance of Administration and Supervision credentials for holders of Elementary and Junior High School credentials who have completed the required 15 units beyond the requirements for the teaching credential and who have completed two years of successful teaching experience. *But holders of general secondary credentials must*

take the required courses in and receive recommendation from an accredited graduate school, even though they may wish to qualify for administrative or supervisory work only on the elementary or junior high school level.

In order to secure the recommendation of this college for either one of these credentials, the following number of the 15 required units must be completed at this institution :

1. Graduates of this college—6, subsequent to graduation.
2. Graduates of other institutions—9.
3. County certified teachers—12.

REQUIREMENTS FOR THE JUNIOR CERTIFICATE AND FOR THE DEGREE OF BACHELOR OF ARTS IN THE PRESECONDARY CURRICULA

This course leads to the A.B. degree. Completion of the requirements of this curriculum also enables the graduate to satisfy the undergraduate requirements for the General Secondary credential which, with post-graduate work, will enable the holder to teach in a senior high school or junior college. The degree courses are limited to majors in art, chemistry, commerce, economics, English, geography, history, mathematics, music, Romanic languages, and zoology.

Total Units, Length of Time, and Residence

The junior certificate will be granted on the completion of 64 units of college work and the degree on the completion of 124 units, representing a four-year course. Certain requirements of the junior certificate may be met by courses taken in the high school. No high school course, however, can be used to reduce the amount of college work required for the junior certificate or for the degree. Not less than 54 units must be earned in the junior and senior years; at least 30 units of work at this college; twenty-four of these residence units must be taken with the rank of senior, at least twelve of which must be taken in the fall or spring semester of the final year before graduation.

Upper Division Course Requirements.

At least 40 of the units completed during the junior and senior years shall be in upper division courses (see definition under heading Courses of Instruction); junior standing requires 60 units of credit. Introductory courses open to first-semester freshmen when taken in the junior or senior year may involve either additional work or reduction in the number of units of credit.

Minor Subject

A minimum of 12 units in a minor subject is required, at least 6 units of which shall be in upper division courses completed in the junior and senior years. Minors are available in the following subjects: art, chemistry, economics, English, foreign language, geography, history, mathematics, music, physics, political science, psychology, zoology.

Subject Matter Requirements in the Lower Division

Physical Education	2 units
Hygiene 1 or 2	2 units
English	6 units
Foreign Languages	15 units
Social Science, including Social Economics 10	12 units
Natural Science	12 units
Year-course in foreign language in addition to the 15-unit requirement, or Mathematics, or Philosophy	6 units
Minor, unless included in one of the above requirements, see above	6 units
Lower division subjects required for the major. See page 49.	
Electives to make total of 64 units.	

Explanation of lower division requirements

English

This requirement may be satisfied either in the freshman year or in the sophomore year. To be chosen from the following year-courses: English 1B-2A, 4A-4B, 52A-52B, 56A-56B.

Foreign Language

At least 15 units in not more than two languages required in the lower division, except that only 10 units in a modern language are required in the commerce major. Each year of high school work in a foreign language will be counted in satisfaction of 3 units of this requirement. A minimum of two high school units is acceptable in any language except Latin, in which one unit is permissible.

Social Science

Courses must be chosen from the following list: Anthropology 50A-50B, 54, Economics 1A-1B,* 11, 18A-18B, Geography 1-2,* History 4A-4B,* 8A-8B,* Political Science 1A-1B,* Social Economics 10, 50.

Natural Science

Twelve units are required from the following lists of high school and college courses.

Only those high school courses that are offered exclusively for students in the third or fourth year may be used. Each year of high school work in science will be counted in satisfaction of 3 units of the requirement. Not more than 6 units may be counted from the following high school laboratory courses: Physics,* Chemistry,* Botany, Biology, Physiology, Zoology.

Six or more units must be chosen from the following college courses: Astronomy 1, 11, Biology 10A-10B,* Botany 2A*2B,* 4, 5, Chemistry 1A*-1B,* 6A-6B,* 7-8,* Geology 1A, 1B, Physics 2A-2B, 3A-3B,* 1A-1B,* 1C-1D,* Zoology 1A*-1B,* 100.*

Additional Year-Course

In addition to the minimum requirement of 15 units in not more than two languages, of 6 units in English, and of year courses in high school elementary algebra and plane geometry, 6 units must be chosen from one of the following groups:

Modern foreign language: Any two consecutive college courses.

Latin: Two years of high school courses in Latin.

Mathematics: 3A-3B, 7A-7B, or 1, 3A. Students with the Commerce major may take Mathematics 1 and 2, or equivalent.

Philosophy: 5A-5B.

* At least one of the courses marked with an asterisk must be chosen to meet the social science requirement and the natural science requirement, respectively.

Electives

Among both electives and required work, a total of not more than 12 units of the applied and vocational courses listed below will be counted toward the junior certificate or the A.B. degree, in both the lower and upper division combined:

Agriculture 20; Art 61A, 61B; Journalism 53A-53B, 153A-153B; all courses in Applied Music, and all musical organizations; Physical Education 2A-B to 14A-B, 37, 53, 54, 55, 56, 57, 62A, 62B, 151, 153, 155, 156A, 156B, 157A, 157B, 160, 163, 165, 166, 168, 169, 170, 171, 172, 173, 174, 175, 177, 178A, 178B, 179, 180; Secretarial Training, all courses.

Recommended Program for Meeting the Lower Division Requirements

	FRESHMAN YEAR	Units Sem. I	Units Sem. II
Social Economics 10-----	3	3	--
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Hygiene 1 or 2-----	2	2	--
English -----	1 or 3	3	3
Foreign Language or electives-----	3-5	3-5	3-5
Social Science -----	--	--	3
Natural Science and/or electives, including preparation for the major-----	2 $\frac{1}{2}$ -6 $\frac{1}{2}$	4 $\frac{1}{2}$ -6 $\frac{1}{2}$	
	16	16	
	SOPHOMORE YEAR		
Physical Education -----	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Foreign Language -----	3	3	3
Additional year course-----	3	3	3
Social Science -----	3	3	3
Natural Science or electives-----	3	3	3
English (if only 4 units taken in freshman year)-----	3	--	--
Electives, including preparation for the major-----	$\frac{1}{2}$	3 $\frac{1}{2}$	
	16	16	

Lower Division Subjects Required for the Presecondary Majors

The student is advised to choose his major as early in his college course as practicable so that he may be able to plan his work according to the major requirements. Failure to meet the lower division requirements of the major department before the junior year may make it impossible to satisfy the upper division requirements within the normal period of two years.

Art

Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Chemistry

Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-8, Physics 2A-2B and 3A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in chemistry or to transfer to another college, and there work for a degree with a major in chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Commerce

Economics 1A-1B, 11, 14A-14B (6 units); English 1B-2A; Geography 1-2; Mathematics* 1, and 2; History 4A-4B or 8A-8B or Political Science 1A-1B.**

Economics

Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B; History 8A-8B; Psychology 1A and 1B or 4A or 4B; Geography 1 and 2; Anthropology 50A-50B. Recommended: Social Economics 50; Economics 14A-14B, 18A-18B.

English

English 1B-2A and six units from 52A-52B, 56A-56B. Recommended: A reading knowledge of German or French.

Foreign Languages

Group major: French A-B, C-D, and Spanish A-B, C-D.

The group major requirements are based on the assumption that the student will have taken courses in the high school, equivalent to the college course in elementary French or Spanish.

Geography

Geography 1, 2, 3 and Geology 1A-1B. Recommended: A reading knowledge of French or German.

History

History 4A-4B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one lower division history course during a semester. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B.

Mathematics

Mathematics 3A-3B, 4A-4B. With permission of the department, 7A-7B may replace 3A-3B. Recommended: Physics, Surveying, Descrip-

* For the equivalent of Mathematics 1, see the prerequisite to Mathematics 2.

** Summary of all lower division requirements for the commerce major.

Economics 1A-1B-----	6 un.	History 4A-4B, 8A-8B or	
Economics 11-----	3	Political Science 1A-1B--	6 un.
Economics 14A-14B-----	6	Hygiene -----	2
Economics 18A-18B-----	6	Mathematics* 1, 2-----	6
English 1B-2A-----	6	Natural Science-----	12
Foreign Language-----	10	Physical Education-----	2
Geography 1-2-----	6	Social Economics 10-----	3

tive Geometry, Astronomy and a reading knowledge of French and German.

Music

Music 1A-1B, 2A-2B, 4A-4B, and 2 units of electives in music. The electives in music in both lower and upper division must include at least 6 units in Applied Music (study of voice, or an instrument), of which at least 3 units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 49.

Zoology

Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4, and 5.

* * * * *

SUBJECT MATTER REQUIREMENTS IN THE UPPER DIVISION

Psychology 1A (unless elected in lower division)-----	3 units
Political Science 101-----	2 units
Education-----	12 units
Minor (minimum in upper division courses)-----	6 units
Major-----	

Electives to make a grand total of 124 units.

Explanation of upper division requirements listed above:

Political Science 101

Political Science 113 or History 171A-171B or History 173A-173B will be accepted as substitutes for this requirement.

Education

A minimum of 12 units in education is required and a maximum of 18 units will be counted toward the degree. The courses in education for the minimum requirement must be chosen from the following list:

Ed. 1, Introductory Principles (lower division elective); Ed. 121, Principles of Secondary Education; Ed. 106, Philosophy of Education; Ed. 107, History of Education; Ed. 108, Educational Measurements; Ed. 109, Educational Administration and Supervision; Ed. 137, Comparative Education; Ed. 130, Educational Psychology; Ed. 140, Elementary Educational Statistics; Psychology 102, Genetic Psychology.

Major

The specific requirements in each major field are listed in the paragraphs immediately following.

Electives

These must be so chosen that, with the required subjects, a minimum of 40 units will be completed in upper division courses after the student has attained upper division standing. (See, also, restrictions concerning the choice of applied and vocational courses, as explained on page 49.)

Major Requirements in the Various Fields

Art

Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150, 152A, 195, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses; English 4A-4B, 106A-106B, 117; French A-B; History 4A-4B, 111A-111B.

Chemistry

A minimum of twenty upper division units in chemistry including Chemistry 101-102. The choice of a related minor and the organization

of the course of a major student must follow a definite plan approved by the department.

Commerce

Econ. 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, 199 and 16 units additional chosen in one of the following groups:

A. Accounting: Econ. 160A-160B, 161, 163, and 4 units in electives.

B. Banking and Finance: Econ. 131, 133, 134, 135, and 4 units in electives.

C. Marketing and Merchandising: Econ. 123, 125, 171, and 7 units in electives.

Geog. 141 may be used in the electives under A, B, C.

Economics

Required: Economics 100, 140 and 199, with 7 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171 and 194. Electives: Nine upper division units in economics. Economic geography may be substituted for three elective units in economics.

English

Twenty-four units in upper division English to be selected and arranged under supervision of the department. Not over four units may be in composition. A reading knowledge of German or French.

Foreign Languages

Group major: Eighteen upper division units in one language or twelve units in one language and six units in the other.

Geography

Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

History

Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199.

Mathematics

Twenty-four units of upper division work in mathematics, or eighteen units in mathematics and six units in closely related subjects, arranged in consultation with the chairman of the department. Mathematics 111, 112, and 119 should be included in every major. Related courses offered by other departments include Statistical Methods (Economics 140), Mathematics in the Junior High School (Education 112) and certain upper division courses in chemistry and physics.

Music

Music 103A-103B, 105A-105B, 107A-107B, 108, and 12 units of upper division elective courses in music. (See statement concerning Applied Music under lower division requirements.)

Zoology

(1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or 18 in the major subject and six in related courses in botany, organic chemistry, physics and physiology.

Lower Division Arrangements and the Junior Certificate

The State Board of Education has authorized fields in which majors and minors may be given in the California Teachers Colleges as follows: Agriculture, Art, Biological Science, Education, Commercial Education, English, Foreign Languages, Home Economics, Industrial Arts Education, Mathematics, Music, Physical Education, Physical Science, Philosophy, Psychology, Social Science.

Since the professional training of teachers requires the maintenance of the standard lower division courses in the field of letters and science, certain courses are available for students of this college who wish to make adaptations of their lower division curricula to correspond to the typical lower division preprofessional curricula. The completion of a curriculum will give junior standing upon transfer to a college offering upper division work in the appropriate field. Such available adaptations of freshman and sophomore courses offered by this college are: Prelegal, premedical, predental, social service, engineering, preagricultural, accountancy, secretarial training. Special advisers have been appointed for each of the above curricula, who will assist students at registration time in making out programs so that they may qualify for the Junior Certificate. A list of these advisers is published in the Time Schedule each semester.

COURSES OF INSTRUCTION

Figures in parentheses indicate the unit value of the course.

Courses numbered from 1 to 99 are lower division (freshman or sophomore) courses; those numbered 100 and above are upper division (junior or senior) courses.

Freshmen are not admitted into upper division courses. First semester sophomores who have an average grade of not less than 2.0 grade points and second semester sophomores who have an average grade of not less than 1.5 grade points may enroll in an upper division course provided they were registered in at least 12 units in the preceding semester. It is understood that ordinarily the instructor will be consulted by sophomores wishing to take upper division courses. In such cases an upper division course will count as lower division credit.

One "unit" represents an hour recitation or lecture, together with the required preparation, or three hours laboratory work each week for a semester of 18 weeks.

The semester for offering courses is designated as follows: (1) Fall; (2) Spring; (3) Fall and Spring; (4) Year course, beginning either Fall or Spring (5) Year course. Courses designated as "Year course" begin in the Fall, but those given in the list below may be taken in the reverse order (i.e., the second semester of the course may be taken before the first semester) or the second semester may be taken alone. In the case of other year courses, students who have completed the equivalent of the first semester's work may seek permission from the instructor to take the second half of the course. Single semester courses having the letter B as a part of the number (as for example, Art 61B) are not supposed to follow another course of the same number unless so indicated in the prerequisites to the course.

YEAR COURSES OPEN TO REGISTRATION IN THE MIDDLE OF THE YEAR

Economics 18A-18B	Spanish 110A-110B
Economics 160A-160B	History 4A-4B
English 4A-4B	History 8A-8B
English 52A-52B	History 111A-111B
English 56A-56B	History 121A-121B
English 106A-106B	History 145A-145B
French 101A-101B	History 146A-146B
French 105A-105B	History 151A-151B
French 107A-107B	History 156A-156B
French 110A-110B	History 171A-171B
French 111A-111B	History 173A-173B
Spanish 101A-101B	Music 2A-2B
Spanish 102A-102B	Music 103A-103B
Spanish 104A-104B	Music 110A-110B
Spanish 105A-105B	Political Science 1A-1B

Although the College fully expects to carry out the arrangements planned in the list of courses, it reserves the right to make changes.

Classes in the courses listed in which the enrollment does not come up to the minimum number set by the State Department of Education may not be offered or may be postponed for a semester or a year.

AGRICULTURE

20. Nature Study.

SKILLING

A course to show the student what material, selected from the various sciences, may be woven into a nature study course suitable for children, with special reference to school and home gardening and agriculture. The subject matter covered is partly drawn from the physical sciences, astronomy, physics, etc. (for the upper grades), and partly from life studies of the plant and animal world (for lower grades). May be credited as natural science only for students majoring in Education.

Fall and Spring (3).

ANTHROPOLOGY

LOWER DIVISION COURSES

50A-50B. Man's Evolutionary History.

ROGERS

Origin and antiquity of man. Classification of races. Origin and development of civilization. Prerequisite: Sophomore standing or special arrangement with instructor. Students wishing to take the second half of the course without the first half should consult the instructor.

Year course (3-3).

51A-51B. The American Indian.

ROGERS

Pre-Columbian cultures of the American Indian. Origin and migration of New World peoples. Prerequisite: Sophomore standing or special arrangement with instructor. Students wishing to take the second half of the course without the first half should consult the instructor.

Year course (3-3).

52. Primitive Cultures.

ROGERS

History and cultural development of primitive races of mankind. Particular consideration given to religion, arts and social organization of living primitive peoples.

Fall (3). (Offered in odd-numbered years.)

53. Primitive Religious Culture.

ROGERS

Beliefs and ritual of primitive man. Magic and religion. Forms of animism and polytheism. Primitive mentality and the supernatural.

Spring (3). (Offered in even-numbered years.)

54. Social Anthropology.

ROGERS

An anthropological study of social institutions in primitive and civilized societies. The evolution of family organization, religion, property right, and government traced in elementary and advanced civilization. Ritualism and education considered as processes of culture conservation and social control.

Fall and Spring (3).

ART

Lower division preparation for the presecondary major in art and for the junior certificate: Eighteen units carefully chosen from lower division art courses to meet the stated prerequisites for upper division work. These shall include Art A-B, 5, 6A-6B, 50 or the accepted equivalents, and six elective units in art.

Presecondary major (upper division): Not less than twenty-four units of upper division art. These shall include Art 112A, 115A-115B, 150, 152A, 195, and ten upper division elective units in art.

It is recommended that students in meeting degree requirements and in choosing free electives, select from the following courses: English 4A-4B, 106A-106B, 117; French A-B; History 4A-4B; 111A-111B.

LOWER DIVISION COURSES

Art Appreciation and History

5. Fundamentals.

JACKSON

An illustrated lecture course intended to increase appreciation and give a basic understanding of the elements and principles of art as expressed in the architecture, painting, sculpture, and crafts of the past and present.

Fall and Spring (2).

50. Appreciation and History.

JACKSON

A survey of the development of painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance, by means of illustrated lectures and discussion. (Not open to freshmen, except by special permission.)

Fall (3).

Design

6A. Structure.

BORSUM

Fundamentals of design and composition and theory of color. Basic course used as a prerequisite for all advanced art work.

Fall and Spring (2).

6B. Structure (continued).

PATTERSON

Original work in creative design with special stress on modern tendencies. Prerequisite: Art 6A.

Spring (2).

11A. Industrial Design.

PATTERSON

Problems in creating original designs for decorative and useful articles, jewelry, lamps, and objects that may be made in various materials by hand or machine process. Prerequisite: Art 6A-6B.

Fall (2). (Offered in even-numbered years.)

11B. Applied Design.

PATTERSON, BORSUM

Designing and completion of actual objects by the students. Such processes involved as carving, painting, dyeing, block printing, batik and the like. Prerequisites: Art 6A-6B, 11A.

Spring (2). (Offered in odd-numbered years.)

14A. Lettering.

BORSUM

Fundamental art principles applied to lettering. Practice for quick, accurate lettering; original problems using letters as design. Prerequisite: Art 6A.

Fall (2).

14B. Posters and Commercial Art.

BORSUM

The application of lettering to posters, newspaper and magazine advertising, and other forms of commercial art. The study of composition combined with lettering and special study of modern tendencies in publicity. Prerequisites: Art 6A, 14A.

Spring (3).

52A. Stage Design.

PATTERSON

Theory of line, color, and lighting in relation to the stage. Original sets and costumes developed on a miniature stage. Study of the development of the modern art of the theater. Upper division credit will be given in this course to students of junior standing upon the completion of extra theme work and additional original problems. Prerequisite: Art 6A.

Fall (3).

94. Costume Design.

PATTERSON

Original problems in designing modern costumes. A study of line, color, texture, type, and suitability to the wearer and to the occasion; foreign and historic influence on dress. Prerequisite: Art 6A.

Fall (3). (Offered in odd-numbered years.)

Drawing and Painting

A-B. Freehand Drawing.

JACKSON

Semester I: Problems involving perspective to develop ability to draw still life, furniture, exteriors, interiors, and the like.

Semester II: Outdoor sketching of landscape and figure, and studio work from still life and costume pose. Emphasis on composition and technique in the handling of various mediums, pencil, pen and ink, charcoal, pastel, and water color.

Year course (2-2).

15A-15B. Life Drawing.

JACKSON

Drawing from the nude model. Does not duplicate the former course in painting, numbered Art 15A-15B.

Year course, beginning either Fall or Spring (2-2).

16A-16B. Painting.

JACKSON

Semester I: Composition of still life and flower forms in water color.

Semester II: Landscape and more advanced composition in water color. Prerequisite: Art A-B. No credit for students having completed Art 15A-15B, painting.

Year course, beginning either Fall or Spring (2-2).

Crafts

61A. Elementary Crafts.

HAMANN

Practical problems in elementary craft work, bookbinding, basketry, weaving, puppetry (including the dramatization and production of a puppet play), and demonstration of such processes as paper making, papier-mache, paper decoration through batik, and the like. Prerequisite: Art 6A, when possible.

Fall and Spring (2).

61B. Elementary Crafts.

HAMANN

Aimed to develop creative expression; to gain a certain ability to use simple tools, and some knowledge of suitable materials for elementary schools. The work covers toys in wood, tin, and the like; elementary clay modeling and pottery; demonstrations of cement mixing and of soldering and the adaptation of these processes to student-conducted activities. Prerequisite: Art 6A.

Fall and Spring (2).

62. Advanced Crafts.

HAMANN

Problems for advanced students involving the application of design principles to metal work, pottery, weaving, bookbinding, and other crafts.

Prerequisites: Art 6A and 6B.

Spring (2).

UPPER DIVISION COURSES

Art Appreciation and History

150. Appreciation and History.

JACKSON

The period from the Renaissance through the modern school, treated in the same manner as in Art 50.

Spring (3).

Design

112A-112B. Composition.

JACKSON

Imaginative composition of natural forms in black and white and color. Prerequisites: Art A-B, 6A-6B, and if possible 15A-15B.

Year course (3-3).

112C. Illustration.

JACKSON

Composition fulfilling the requirements of book illustration from poetry, imaginative tales, and legends, in black and white and color. Prerequisite: Art 112A.

Spring (3). (Offered in odd-numbered years.)

152A. Stage Design.

See Art 52A.

152B. Stage Costume.

PATTERSON

Costume studied in relation to drama. Original designs for mood and character. Practical problems in designing and decorating costumes and

accessories for college productions. A brief history of costume from the Egyptian to the modern time. Prerequisites: Art 6A, 52A or 152A.

Spring (3). (Offered in even-numbered years.)

195. Home Decoration.

PATTERSON

House planning and landscaping. Interior decoration. Study of period styles and modern decoration. Illustrated lectures and original problems. Prerequisites: Art A, 6A.

Spring (3).

Drawing and Painting

115A-115B. Life Drawing and Painting.

JACKSON

Drawing and painting from nude and costume models.

Year course, beginning either Fall or Spring (2-2).

115C-115D. Advanced Life.

JACKSON

Painting from nude and costume models and advanced composition in oil. Portraiture. Prerequisite: Art 115A-115B.

Year course, beginning either Fall or Spring (2-2).

116A-116B. Advanced Painting.

JACKSON

Painting in water color and oils from still life and landscape, stressing composition and technique. Prerequisite: Art 16A-16B.

Year course, beginning either Fall or Spring (2-2).

ASTRONOMY

Lower division preparation in astronomy for advanced work and for the junior certificate: Astronomy 1, Plane Trigonometry, Mathematics 3A-3B, 4A-4B, Physics 2A-2B and 3A-3B, or 1A-1B and 1C-1D; a reading knowledge of French or German.

1. Descriptive Astronomy.

SKILLING

A cultural course planned to give as comprehensive a view as possible of the solar system and the stars. Only calculations of an elementary nature. Especial attention to the methods and instruments by means of which astronomical knowledge has been gained. A six-inch Alvin Clarke telescope used for observation. Demonstrations given with a large spectrometer; also a good selection of lantern slides used to illustrate various topics. Prerequisites: Elementary Algebra and Plane Geometry.

Fall and Spring (3).

5. Historic Development of Astronomy.

SKILLING

The leading facts now known in astronomy in the light of circumstances attending their discovery. Prerequisite: Astronomy 1.

Spring (3).

11. Modern Astronomy.

SKILLING

Stars and nebulae. Modern methods and instruments used in the observatory. Theory of matter as it applies to such studies. Prerequisites: Astronomy 1 and a knowledge of Physics.

Fall (3).

BIOLOGICAL SCIENCES

(Biology, Botany, Zoology)

General students who wish to take only one or two courses in this department should register for Biology 10A-10B, Zoology 113C, 114A or 114B, Botany 4 or 5 (see below for prerequisites for each course).

Lower division preparation in botany for advanced work and for the junior certificate: Botany 2A, 2B, 4, 5, and Chemistry 1A.

Lower division preparation for the presecondary major in zoology and for the junior certificate: Zoology 1A, 1B, and high school chemistry or Chemistry 1A. Recommended: Chemistry 1B, French, German, Botany 2A, 2B, 4 and 5.

Presecondary major in zoology: (1) At least a C average in upper division major courses. (2) Twenty-four units of upper division courses in zoology or eighteen in the major subject and six in related courses in botany, organic chemistry, physics, and physiology.

Students preparing to teach science in the junior high school should try to include in their courses work in zoology, botany, physics, chemistry (at least high school chemistry), and Education 120. The following are also desirable: geography, geology, anthropology, astronomy, and upper division biological sciences. See page 30.

Fees: A fee is required in all laboratory courses in this department. (See page 21 for list of fees.) The fee covers the cost of materials used. For breakage and extra material in addition to the estimated need an extra charge must be made.

BIOLOGY

LOWER DIVISION COURSES

10A-10B. General

M. E. JOHNSON

The fundamentals of plant and animal biology, with elementary work in human physiology and heredity. Laboratory work supplements the lectures and includes a study of living and preserved material. Aim of the course to acquaint the student with the basic facts of biology. Designed not only to give the general student an acquaintance with living things and their relationships, but also to furnish the prospective teacher with an adequate background for nature study teaching. Two lectures and one three-hour laboratory period per week. Designed for those who do not expect to specialize in zoology or botany, but not open for credit to students who have taken Zoology 1A, or Botany 2A. Students who have taken 10A-10B may elect Zoology 1A or Botany 2A for credit.

Year course (3-3).

BOTANY

LOWER DIVISION COURSES

2A. General.

HARVEY

Fundamentals of structure and general behavior of seed plants. Two lectures or recitations and two three-hour laboratory periods per week.

Fall (4).

2B. General.

HARVEY

A continuation of 2A treating morphology and relationship of the lower plants and including an introduction to classification of seed plants. Lectures and laboratory as in 2A.

Spring (4).

4. California Plants.

HARVEY

Classification and ecology of representative orders of flowering plants of the San Diego region, including practice in the use of keys. One lecture and three hours laboratory per week.

Spring (2). (Offered in even-numbered years.)

5. Trees and Chaparral.

HARVEY

Practice in the determination of the important species of the San Diego region. One lecture and three hours laboratory per week, with several Saturday field trips.

Spring (2). (Offered in odd-numbered years.)

7. Plant Physiology.

HARVEY

The functions of plants including metabolism, absorption, conduction, transpiration, respiration, growth and movement. One lecture and one three-hour laboratory period per week. Prerequisite: Biology 10A-10B or Botany 2A.

Fall (2). (Not offered in 1934-1935.)

UPPER DIVISION COURSES

102. Plant Geography.

HARVEY

Lectures and field work on the principles of geographical distribution of plants. Prerequisite: Botany 2A-2B, or 4, or equivalent.

Fall (2). (Offered in odd-numbered years.)

104. Taxonomy.

HARVEY

Identification, classification, and distribution of representative orders of flowering plants. Six hours per week of lectures, laboratory, and field work. Prerequisites: Botany 2A-2B, 4.

Spring (3). (Offered in even-numbered years.)

106. Marine Plant Biology.

HARVEY

Marine algae of the San Diego region, including a study of structure, development, identification, and distribution. Collecting trips to the various beaches. One hour lecture and six hours laboratory per week. Prerequisite: A laboratory course in general biology or botany.

Spring (2 or 3.) (Offered in odd-numbered years.)

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case.

Open to students who have completed at least ten units of lower division work in the department with a grade of A or B.

Fall and Spring (1 or 2).

ZOOLOGY

LOWER DIVISION COURSES

1A. General.

HARWOOD

An introduction to animal biology dealing with structure, functions, and evolution of animal life. Laboratory work supplementing the lectures and based on the study and observation of living and preserved material. Valuable to the general student as well as to the biology specialist, acquainting one with the fundamental facts and theories of biology as they pertain to animal life. Two lectures or recitations and two three-hour laboratory periods per week.

Fall (4).

1B. General.

HARWOOD

A continuation of 1A. The structure, relationships, and classification of the chordates. Two lectures and two three-hour laboratory periods per week. Prerequisite: Zoology 1A.

Spring (4).

20. Anatomy and Physiology.

CROUCH

An elementary course in human anatomy and physiology. Prerequisite: High school biology, or Biology 10A-10B. Lectures three hours per week.

Fall (3). (Offered in even-numbered years.)

UPPER DIVISION COURSES

100. Embryology.

M. E. JOHNSON

The development of vertebrates as illustrated by the frog, chick, and pig. Six hours of laboratory and two hours of lecture per week. Prerequisite: Zoology 1B or Biology 10B.

Spring and Fall (4). (Offered in odd-numbered years.)

106. Comparative Anatomy of the Vertebrates.

CROUCH

Dissection, study, and comparison of organ systems of typical vertebrates. Two hours per week of lecture and six hours of laboratory. Prerequisite: Zoology 1B or Biology 10B.

Fall (4). (Offered in odd-numbered years.)

112. Marine Zoology.

M. E. JOHNSON

Designed to acquaint the student with the many interesting animals found along the beaches in the San Diego region. Identification, distribution, associations, structure, and to some extent, behavior and life histories of the organisms. Frequent collecting trips to the beach and study of the living animals in the laboratory. Prerequisite: A laboratory course in elementary Biology or Zoology.

Fall (3). (Offered in odd-numbered years.)

114A. Genetics.

HARWOOD

General introductory course designed to acquaint the student with the fundamental principles of heredity and variation. Special attention given to the Mendelian interpretations of the facts of inheritance. Two lectures per week.

Fall (2).

114B. Evolution.

JOHNSON

The development of theories of evolution. Two lectures per week.

Fall (2). (Offered in even-numbered years.)

121. Entomology.

HARWOOD

The classification, life history, structure, and physiology of insects. Prerequisite: Zoology 1A or Biology 10B. Two hours of lecture and six hours of laboratory per week.

Spring (4). (Offered in odd-numbered years.)

113A. Taxonomy and Natural History of the Vertebrates.

HARWOOD

Frequent field trips and the identification of preserved material. One hour of lecture and six hours of laboratory per week. Prerequisite: Zoology 1B or Biology 10B.

Spring (3). (Offered in even-numbered years.)

113B. Ornithology.

CROUCH

The study and identification of birds, especially those of the Pacific coast and the San Diego region. Six hours per week of lectures, laboratory, or field excursions. Prerequisite: Zoology 1B, or Biology 10B.

Spring (3). (Offered in odd-numbered years.)

113C. Field Study of Birds.

CROUCH

The study and identification of the birds of the San Diego region. Three hours of laboratory or field work per week.

Spring (1). (Offered in even-numbered years.)

130. Readings in Biology.

HARWOOD

Readings from a suggested bibliography with informal class discussion of topics. Subjects discussed will include history of biology, biological principles, ecology, economic zoology, zoogeography, breeding habits, animal behavior.

Spring (2). (Offered in even-numbered years.)

199. Special Study.

INSTRUCTORS OF THE DEPARTMENT
(M. E. JOHNSON in charge)

Reading or work other than is outlined in the above courses. Admission only by consent of the instructor with whom the work is to be done and the head of the department. Credit and hours to be arranged in each case. Open to students who have completed at least ten units of work in the department with a grade of A or B.

Fall and Spring (1 or 2).

CHEMISTRY

Lower division preparation for the presecondary major in chemistry and for the junior certificate: Chemistry 1A-1B with an average grade of C or better, Chemistry 6A-6B or 7-8, Physics 2A-2B and 3A-3B or their equivalent, Mathematics 7A-7B or the equivalent, and a reading knowledge of German. Students planning to do graduate work in chemistry or to transfer to another college, and there work for a degree with a major in Chemistry, are advised to take Physics 1A-1B-1C-1D and Mathematics 3A-3B-4A-4B in place of the courses listed above.

Presecondary major (upper division): A minimum of twenty upper division units in chemistry including Chemistry 101-102. The choice of a related minor and the organization of the course of the major student must follow a definite plan approved by the department.

LOWER DIVISION COURSES

1A-1B. General Chemistry.

MESSNER, ROBINSON

The general principles and laws of chemistry, and a description of the elements and their compounds. Two lectures, one quiz and two laboratory periods per week. The laboratory work in the second semester consists of work in qualitative analysis. Prerequisites: At least two years of high school mathematics. Recommended: High school chemistry and physics.

Year course (5-5).

2A. Descriptive Chemistry.

ROBINSON

A one-semester lecture course designed for students who do not expect to do further work in chemistry but who desire an appreciation and understanding of the subject. The fundamental laws of chemistry, the constitution of matter, radioactivity, and a brief discussion of the field of organic chemistry, besides the customary description of the properties and uses of the more common chemical substances.

Spring (3).

6A-6B. Introductory Quantitative Analysis.

MESSNER

Determinations by gravimetric, volumetric, and electro-analysis, particular attention being given to the cultivation of laboratory technique. One hour quiz and lecture, and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

7-8. Organic Chemistry.

ROBINSON

A general consideration of the carbon compounds (both aliphatic and aromatic) and their derivatives; their synthesis, constitution and properties, and the principles involved. Two lectures and one laboratory period per week first semester; one lecture and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

UPPER DIVISION COURSES

101-102. Advanced Inorganic Chemistry.

MESSNER

The laws and theories of elementary work from the viewpoint of physical chemistry. Laboratory work covering such topics as gas law, mol weights, laws of combination, ionization, equilibrium relationships, and electrochemistry. Two lectures, two laboratory periods per week. Prerequisites: Chemistry 1A-1B, 6A-6B, and Mathematics 7A-7B or equivalent.

Year course (4-4).

106A-106B. Quantitative Analysis.

MESSNER

An upper division course covering the same field as Chemistry 6A-6B but including some more advanced work. One lecture and two laboratory periods per week. Prerequisite: Chemistry 1A-1B.

Year course (3-3).

107-108. Organic Chemistry.

ROBINSON

An upper division course covering the same field as Chemistry 7-8 but including some more advanced work. Two lectures and one laboratory period per week first semester; two lectures and two laboratory periods per week second semester. Prerequisite: Chemistry 1A-1B.

Year course (3-4).

110. Industrial Chemistry.

ROBINSON

An introductory lecture course designed to acquaint the student with types of apparatus and unit processes of importance in the industry. A few typical industrial processes discussed in detail. Prerequisites: Chemistry 1A-1B and credit or registration in Chemistry 6A-6B and 7-8.

Spring (3). (Offered in even-numbered years.)

112. Industrial Analysis.

ROBINSON

A laboratory course including the analysis of fuels, petroleum products, water, and gas. Prerequisite: Chemistry 6A-6B.

Spring (2). (Offered in even-numbered years.)

114. Biochemistry.

MESSNER

An introductory lecture course covering the carbohydrates, proteins, fats and the changes which they undergo in digestion and metabolism, as well as a consideration of the vitamins and other accessory food factors and their importance to the body. A brief discussion of the chemistry of plant life. Prerequisites: Credit or registration in Chemistry 101-102.

Spring (3). (Offered in odd-numbered years.)

123-124. Organic Preparations.

ROBINSON

A laboratory course illustrating some of the more important synthetic methods of organic chemistry. Laboratory and conferences. Prerequisite: Chemistry 7-8. A reading knowledge of German recommended.

Year course, beginning either Fall or Spring (2 to 5-2 to 5).

125. History of Chemistry.

ROBINSON

Development of the science of chemistry from the time of the alchemists to the present. Conducted on the reading, report, and seminar basis. Prerequisite: Chemistry 101-102.

Fall (2). (Offered in even-numbered years.)

199. Special Topics.

INSTRUCTORS OF THE DEPARTMENT

Supervised individual work in specialized branches of chemistry such as colloid chemistry, biochemistry, applications of the phase rule, etc. Admission only by the consent of the instructor. Hours and credit to be arranged in each case. Open only to upper division students who have shown their ability to do A or B work in chemistry.

Fall and Spring (1-3).

ECONOMICS

Lower division preparation for the presecondary major in economics and for the junior certificate: Economics 1A-1B and at least one of the following: Political Science 1A-1B; History 4A-4B; History 8A-8B; Psychology 1A and 1B or 4A or 4B; Geography 1 and 2; Anthropology 50A-50B. Recommended: Social Economics 50; Economics 14A-14B, 18A-18B.

Presecondary major (upper division) in economics, required: Economics 100, 140 and 199, with 7 units selected from the following: Economics 121, 123, 127, 131, 133, 134, 135, 171, and 194. Electives: Nine upper division units in economics. Economic geography may be substituted for three elective units in economics.

Commerce

Lower division preparation for the presecondary major in commerce and for the junior certificate: Economics 1A-1B, 11, 14A-14B (6 units); English 1B-2A; Geography 1-2; Mathematics* 1 and 2; History 4A-4B or 8A-8B or Political Science 1A-1B.

Presecondary major (upper division) in commerce, required: Economics 18A-18B (it is recommended that this be taken in the lower division if possible), 121, 140, 199 and 16 units additional chosen in one of the following groups:

A. Accounting: Economics 160A-160B, 161, 163 and 4 units in electives.

B. Banking and Finance: Economics 131, 133, 134, 135, and 4 units in electives.

C. Marketing and Merchandising: Economics 123, 125, 171, and 7 units in electives.

Geography 141 may be used in the electives under A, B, C.

LOWER DIVISION COURSES

1A-1B. Principles of Economics.

CAMERON

The basic principles of economics: utility, wealth, value, price; economic production, distribution, and consumption; rent, interest, wages,

* For the equivalent of Mathematics 1, see the prerequisite to Mathematics 2.

and profit; competition, monopoly, and large scale production; property, economic waste, and luxury; money and banking, international trade and tariffs; transportation corporations, labor problems, socialism, taxation, etc. Aims of the course: (1) to provide a foundation for further intensive study of economic problems; (2) to furnish to those who expect to follow business pursuits a broad foundation in economic principles; and (3) to introduce future citizens to political and economic problems of our time. Lectures, discussions, quizzes, and collateral reading. Not open to entering freshmen except by special arrangement.

Year course (3-3).

11. Economic History of the United States.

WRIGHT

A comprehensive survey of American economic development and of national legislation in the field of industry.

Spring (3).

14A-14B. Accounting.

WRIGHT

A knowledge of bookkeeping not required and not advantageous. The balance sheet; profit and loss statement; various types of books of original entry; the opening, conducting, and closing of books for different kinds of businesses; organizations, reorganizations, dissolutions, and consolidations; branch stores accounting, etc., keeping in view the best modern accounting practice. Five hours lecture and laboratory.

Year course (3 or 4-3 or 4.)

18A-18B. Commercial Law.

STANTON

The leading and fundamental principles of business law. Simple cases showing the actual application of the principles to commercial and business transactions, rather than the development of those principles. The subjects covered: contracts, sales, agency, partnerships, corporations, real property, negotiable instruments, insurance, and wills, with a brief study of evidence.

Year course (3-3).

UPPER DIVISION COURSES

100. Modern Economic Thought.

A. G. PETERSON

Classical doctrine in the light of recent economic theory. A critical analysis of contemporary economic thought. Prerequisite: Economics 1A-1B.

Spring (3).

121. Business Administration.

A. G. PETERSON

Problems of business administration as an interrelated whole and as an indication of lines of study which may lead to the solution of those problems. A discussion of the problems of the business administrator with particular reference to the character of the problems involved and to the control policies and devices of the manager. Questions, problems, and case studies. Prerequisite: Economics 1A-1B.

Fall (3).

123. Marketing.

CAMERON

Our distributive organization and its functions, including the marketing of both agricultural and manufactured products. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1934-1935.)

125A. Advertising

Functions, theory, principles and applications; selecting the right appeal; surveys and analyses; studying markets; budgeting the appropriation; layouts, type, borders and illustrations; use of color; choice of mediums; writing publicity and promotion stories; openings, anniversaries, sales and special events; institutional copy; the advertising agency and its functions; sales and collection letters.

Fall (2). (Not offered in 1934-1935.)

125B. Salesmanship.

Salesmanship, the market basket of knowledge; the mechanics of the mind; overcoming fear; the human element in selling; meeting competition; analyzing a sale in advance and methods of using this analysis in consummating a sale; personal attributes; selling an invisible commodity; selling a specialty; retail selling; the steps of a sale. Actual merchandise will be used in demonstration. Outstanding salesmen in the various crafts will illustrate correct methods of selling.

Spring (2). (Not offered in 1934-1935.)

127. Urban Land Economics.

CAMERON

The development of urban economy, location and structure of cities, urban land utilization, city planning and zoning, taxation, housing, urban land credit and land valuation, with special emphasis upon local conditions. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1934-1935.)

131. Public Finance.

Principles and practice of taxation, public expenditures, and financial administration. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1934-1935.)

133. Corporation Finance

CAMERON

The corporate form of organization, instruments of long-time finance, methods of raising capital, efficient financial management, and the financing of reorganizations. Prerequisite: Economics 1A-1B.

Fall (3).

134. Investments.

CAMERON

Investment principles and practices with emphasis upon problems of the small investor, such as tests of a good investment, sources of information, types of stocks and bonds, mechanics of purchase and sale, investment trusts, real estate mortgages, and the like.

Spring (3).

135. Money and Banking.

CAMERON

The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States. Prerequisite: Economics 1A-1B.

Fall (3).

140. Statistical Methods.

BROOM

The nature and uses of statistical method in the social sciences. Practice in the tabular and graphical presentation of data; in the computation of averages, ratios and coefficients, measures of dispersion, and measures of relationship. Research studies are made, utilizing data obtained from typical economic and commercial situations, involving index numbers, time series, and business cycles and barometers. Opportunity to obtain practice in the use of calculating machines and other aids to computation. Prerequisite: Mathematics B and C, or equivalents, or Mathematics I. Only two units of credit are available for this course in the case of students who previously have completed Education 140.

Spring (3).

151. Personnel Administration.

A. G. PETERSON

Principles of scientific management, labor turnover, selection and placement of personnel, discipline and discharge, methods of wage payment, health and safety, labor participation in management. Prerequisite: Economics 1A-1B.

Spring (3). (Not offered in 1934-1935.)

160A-160B. Advanced Accounting.

WRIGHT

An intensive study of the corporation, its accounting and financial problems; a thorough study of the balance sheet; depreciation; factory accounting, etc. Under practical accounting an endeavor is made to design, construct, and operate sets of books to meet the needs of different conditions and kinds of businesses. Six hours lecture and laboratory. Prerequisite: Economics 14A-14B.

Year course (3-3.)

161. Cost Accounting.

WRIGHT

Principles and methods of cost accounting in the mercantile establishment and in the factory. A study of bookkeeping procedure, the forms used, and their application to practical problems. Prerequisite: Economics 14A-14B.

Spring (3). (Not offered in 1934-1935.)

162. Accounting Systems.

WRIGHT

The accounting systems used in various types of business and financial concerns. Some practice in devising and installing systems. Prerequisite: Economics 14A-14B.

Spring (3). (Not offered in 1934-1935.)

163. Machine Accounting.

WRIGHT

The application of mechanical accounting devices to accounting conditions together with a study of efficient machine methods that conform

to good accounting practice and yet meet the practical accounting requirements that are found in many classes of business. In addition to a thorough study of machine installations, the course requires considerable practice in the operation of standard accounting machinery. Prerequisite: Economics 14A-14B.

Fall (3). (Not offered in 1934-1935.)

171. Transportation.

CAMERON

The development of railway transportation; railroad financing; rates and rate making; government regulation; government operation of railroads during the war; recent development of motor and air transportation; current problems. Prerequisite: Economics 1A-1B.

Spring (3).

194. International Economic Relations.

A. G. PETERSON

A brief treatment of certain geographical, sociological, and legal phases of international relations followed by a study of the commercial and industrial basis of world economy touching upon a number of special problems involved, and supplemented by an introductory study of materials covering the processes, principles, and policies of international trade.

The course concerns itself primarily with the economic basis of international relations, but political aspects are almost constantly taken into account in recognition of the fact that international relations are frequently political in form but economic in content.

Spring (3).

199. Special Study.

THE STAFF

Designed exclusively for seniors with a major in economics or commerce.

Spring (2).

Economic Geography

(See Geography)

Social Economics

LOWER DIVISION COURSES

10. Foundations of Civilization.

A. G. PETERSON

A survey course designed to give the student a preliminary view of selected fields of human knowledge so that he may be able to correlate for himself the knowledge which is available in artificially separated fields and may have a larger measure of unity and coherence in his college work; to aid the student to orient himself effectively and usefully in the complex social life about him; to introduce the student to sound methods of approach in dealing with the problems of civilization and to cause him to develop a scientific way of looking at himself and society; to stimulate interest and concern in the problems of the day and to arouse the student to independent and constructive thinking by bringing together the various lines of present-day thought, by offering interpretations of far-reaching and deep-moving changes in social institutions, and by calling attention to the essential unity of all knowledge and the

basic objectives common to government, industry, education, religion and other social institutions.

Fall and Spring (3).

50. General Sociology.

KELLY

A study of the nature and organization of human group activity, including the relation of cultural heritage to public opinion and social change. Previous preparation in biology and psychology recommended.

Fall and Spring (3).

Social Psychology

(See Psychology)

Secretarial Training

A. Business Mathematics.

WRIGHT

A practical course in the mathematics of business. Development of the ability to add, subtract, and divide rapidly and accurately. A thorough study of interest, compound interest, discount, amortization tables, insurance rates, etc.

Fall (1).

1A-1B. Typewriting.

AMSDEN

A rapid development of a thorough command of a keyboard by the touch method. The acquisition of speed and the artistic arrangement of type-written material with special reference to commercial forms, tabulation and billing; specifications, legal forms, and preparation of manuscripts; transcription, mimeographing, etc. Eight hours lecture and laboratory practice.

Year course (3-3).

2A. Typewriting.

AMSDEN

A short course designed for those not wishing to enter the business office but desiring a knowledge of the use of the typewriter. Five hours laboratory practice.

Spring (2).

3A. Office Methods and Appliances.

WRIGHT

Practice and principles of office management, including organization, arrangement, and operation. Study and use of modern office appliances, such as the multigraph, mimeograph, filing devices, calculating and book-keeping machines. Trips made to local establishments to study at first hand actual business conditions. Prerequisite: Secretarial Training 1A or its equivalent.

Spring (3).

5A-5B. Stenography.

AMSDEN

An intensive course designed for the practical preparation of office secretaries. A thorough study of the Gregg System. Development of the ability to read and write shorthand rapidly and correctly, both literary

and commercial. The shorthand speed necessary to pass a civil service examination is attained by the end of the year.

Year course (5-5).

6A. Advanced Stenography.

AMSDEN

Development of speed in writing and transcription. Advanced dictation on letter forms, legal forms, speeches, and literary material.

Fall (3).

EDUCATION

LOWER DIVISION COURSES

1. Education—Introductory Principles.

BACON, DEPUTY

An orientation course in professional education. A preliminary survey covering briefly the historical and philosophical background of the modern public school and culminating in a consideration of modern educational practice, with special reference to public and quasi public organizations which more or less directly participate in the program of education.

Not offered in 1934-1935. Upper division students who need this course to complete curriculum requirements may substitute Education 107 or S107.

17. Music in the Elementary School.

L. D. SMITH

Main objectives of music teaching in the public elementary schools. Study of the child voice. Organization of song material by grades. Procedure in presenting rote songs, ear training, elementary notation, sight singing, and part singing. Conducting. Offered only to upper division students who need to complete curriculum requirements in 1934-1935. Prerequisite: Music 1A, or the equivalent.

Fall and Spring (2).

19. Art in the Elementary School.

BORSUM

Discussion of the elements and principles of art and their place in the art expression and appreciation of the elementary school child. Lectures illustrated with examples of children's work and opportunity given for experience with mediums used in elementary school problems. Offered only to upper division students who need to complete curriculum requirements in 1934-1935. Prerequisite: Art 6A.

Fall and Spring (2).

UPPER DIVISION COURSES

106. Philosophy of Education.

AULT

The fundamental biological, psychological, philosophical, social principles underlying modern education, in connection with the demands of modern society in a complex social, economic, and scientific world, with a view to the formulation of a working philosophy for the educative process. Designed as a culmination of the studies of education and its procedures. Open only to students with senior standing.

Spring (3).

107. History of Education.

AULT

A brief study of early Hebrew, Greek, Roman and early Christian education; of the changes brought about by the Renaissance; of the transition to modern secular education; brief reviews of the educational philosophies of the great reformers; a concluding study of the development of the American school system and of American ideals and practices in education. Only 2 units allowed for students having credit for Education S107, History of Education in the United States (offered in the summer session).

Fall (3).

108. Educational Measurements.

BROOM

A brief survey of the development of scientific measurement in the elementary school field, including an intensive study of the more reliable and valid tests of school achievement and of mental ability. Statistical training given in handling data obtained by using measurements in typical school situations, leading to a study of the uses of tests. Practice in the construction of teacher-made, objective tests in the elementary school subjects.

Fall and Spring (3).

109. Educational Administration and Supervision.

BROOM, HARDY

A survey of the systems of organization, classification, and promotion of pupils, and such problems as finance, the teaching staff, building standards, extra-curricular activities, etc. Prerequisites: Education 125, 108, or equivalents.

Spring (2).

110. Educational Organization and Supervision

BROOM

Types of supervision and methods of evaluating and improving teaching. Prerequisites: Education 125, 108, or equivalents.

(2)

111. English in the Junior High School.

F. L. SMITH

Objectives of literature and language teaching in the junior high school; criteria for selection of material; technique of classroom procedure; observation in the city schools. Prerequisite: The satisfaction of the lower division requirements in English for the teaching major in English.

Spring (2).

112. Mathematics in the Junior High School.

RICHARDS

The subject matter, management of it, and methods of teaching it in a junior high school curriculum in general mathematics. Specific problems: the application of arithmetic in current social and business life, intuitive geometry, graphic representation, the phase of algebra suitable to the junior high school pupil, preparation for senior high school mathematics. Prerequisites: Psychology 1A and a passing grade in the Fundamentals Test.

(2) (Not offered in 1934-1935. Students will substitute Mathematics 19).

114. Social Science in the Junior High School.

NIDA

The teaching of some of the elementary facts and principles of a "general" social science suited to the experience and development of the junior high school pupil, through the medium of such social studies in the junior high school curriculum as history, geography, and civics. Methods of developing a genuine and continuing interest in social and civic problems through observation and reading, discussed and illustrated. Special stress on evaluating historical and geographical material for educative purposes on this level. Prerequisites: Six units of geography and six units of history.

Fall (2).

116. Practice Teaching.

AULT AND SUPERVISORS

Systematic observation, participation and teaching under supervision in the campus training school, the Euclid affiliated city elementary school, and the junior and senior high schools of the city of San Diego and vicinity.

The general plan is for elementary school credential candidates to take, in addition to the education practicums, two hours of teaching daily in the campus training school or two and one-half hours daily in the Euclid school throughout one semester; junior high school and special secondary school credential candidates will be guided by their adviser relative to the distribution of their practice teaching. For those seeking a combination of credentials, the requirements for each teaching level must be satisfied. Further information regarding this requirement should be requested of the Dean of Education when the student first registers for practice teaching.

Thirty clock hours of practice teaching will usually carry one unit of credit in the course, but the final amount of credit allowed will depend upon the character and quality of the teaching done by the student. Practice teaching requirements may be reduced for those who furnish evidence of successful public school experience.

The maximum amount of credit allowed for this course is twelve units. The universities usually reduce the amount of practice teaching credit they will allow to four units. Students planning to transfer to such institutions should be prepared to meet this reduction with an equal number of acceptable units in other courses.

No grade below a C is acceptable for credit in this course.

Prerequisites: Admission to upper division teacher training: a C average in all college work and in the work of the preceding semester; three units of work in psychology. No credit will be given for this course unless registration is made in the office of the Dean of Education.

119. Art in the Junior High School.

Art curriculum planning for junior high schools and studio problems and discussion. Prerequisite: Education 19.

Spring (2). (Offered in odd-numbered years.)

120. General Science in the Junior High School.

SKILLING, M. E. JOHNSON

The content, methods, field work, text books, laboratory work, equipment, and reference reading for teaching general science in a junior

high school. Prerequisites: Eighteen units of college science including one year-course in a college biological science, Physics 2A-2B, or equivalent, and high school or college chemistry.

Spring (2). (Offered in odd-numbered years.)

121. Principles of Secondary Education.

NIDA

The principles of educational science that should underlie the organization, administration and curriculum of the secondary school. Prevailing patterns of high school education; tendencies in the direction of future development. Particular attention to the method of directing learning in the secondary schools. Prerequisite: Psychology 1A. Open only to students with senior standing.

Fall and Spring (3).

124. Romance Languages in the Junior High School.

PHILLIPS

A consideration of the main questions of pronunciation, grammar, composition, reading, texts, etc., as applied to teaching elementary classes in French and Spanish; the different methods; their history and value. Prerequisite: Two years of college French or Spanish.

Spring (2). (Not offered in 1934-1935.)

125. The Elementary School Curriculum.

BROOM

An analytical and constructive curricular study of the subject matter taught in the elementary school, with particular emphasis on the upper elementary grades; together with an intensive study of teaching techniques in the elementary school, including observation of typical teaching procedures. The course embraces individual and group research work in curricular materials, visual aids, type lessons, and experimental studies of teaching methods.

Required of candidates for only the junior high school credential. Candidates for a combination of the elementary and junior high school credentials must register for the education practicum instead of this course. Prerequisite: Education 108, taken previously or at the same time.

Fall (3).

127. Music in the Secondary School.

L. D. SMITH

Main objectives of music teaching in the public secondary schools. Organization of the chorus and glee clubs, voice testing, seating, a survey of song materials available. Organization of courses in applied music, harmony, history and appreciation.

Fall (2). (Offered in even-numbered years.)

130. Educational Psychology.

BROOM

Man's equipment for learning and the learning process. Consideration given to human behavior which is fundamental to learning. The study of learning includes such topics as laws of learning, improvements in learning, remembering and forgetting, fatigue in learning, and the transfer of training. Prerequisite: Psychology 1A.

Spring (3).

137. Comparative Education.

AULT

School systems of England, France, Germany, and Denmark; traits of peoples; origin and development of school systems; literacy of populations; traditional influences; characteristic types of schools and educational procedures; governmental and private support; training of teachers.

A knowledge of History of Education desirable but not required.

Fall (3). (Not offered in 1934-1935.)

140. Elementary Educational Statistics.

BROOM

An introductory study of measures of central tendency, of variability, and of relationship which are commonly used in connection with educational work. Laboratory training in statistical method and opportunity to obtain practice in the use of calculating machines and other aids to computation. Data for statistical research taken from typical school situations. Only 2 units allowed students who have taken Economics 140.

Fall (3).

145. Organization and Administration of Music Education.

L. D. SMITH

Theory of the general principles of music administration; correlation of music with the various subjects in the public schools; music tests; creative work.

Fall (2). (Offered in even-numbered years.)

147. Education Practicum—Lower Levels (See description below).

148. Education Practicum—Upper Levels (See description below).

I. Tentative Plan for 1934-1935.

In the fall semester of 1934-1935 the department will discontinue offering Education 1, 17, and 19 to lower division students and Education 125A-B, 126, and 129 to upper division students who are candidates for the elementary school credential. During the year 1934-1935, Education 17 and 19 will be offered only to upper division students who are deficient in these courses.

In place of the discontinued courses all upper division candidates for the elementary school credential will be required to take the two education practicums, neither of which is considered prerequisite to the other. The educational theory covered by the two practicums in the year 1934-1935 will be equivalent to the discontinued education courses enumerated above, plus four units of credit in practice teaching. The maximum credit allowed for either of the practicums for the year 1934-1935 is seven units.

A group of courses taken at this or another institution will not be accepted as a substitute for the educational practicums. If such independent courses have been completed previous to September, 1934, credit may be submitted to the Dean of Education and with his approval an equivalent may be allowed.

II. Proposed Schedule of Work in the Practicums for the Year 1934-1935.

Conferences, lectures, discussions and reports held daily by each classroom supervisor of the upper levels (fourth, fifth, and sixth grades) of

the training school at 8.10 a.m., and by each supervisor of the lower levels (first, second, and third grades) of the training school at 3.10 p.m. As part of the preparation for this work students are required to reserve two hours per week for observation under the direction of the supervisors at 9.10 a.m. on Tuesdays and Thursdays.

Participation for one hour daily in the activities of the pupil-group to which he is assigned will be required of each student. The hour assignment for this work will be made by the supervisor at the time the student registers for the course.

III. Registration for Education Practicums.

The practicum courses are to be taken by the student in his junior year. Assignments will be made by the principal of the training school at the time of preregistration of upper division teacher training students.

160. Vocational Education.

WRIGHT

Aims and objectives of vocational education of less than college grade. Spring (3). (Not offered in 1934-1935.)

161. Junior Business Training.

WRIGHT

The methods and content of the course in the elements of business training as offered in the junior high school. Not open for credit for those who have taken Secretarial Training 3A.

Spring (2).

163. Stenography.

AMSDEN

Methods and content of courses in stenography. Prerequisite: Secretarial Training 5A.

Fall (2).

164. Bookkeeping.

WRIGHT

Various types of bookkeeping method, with considerable study of content.

Fall (2).

165. Typewriting.

AMSDEN

Methods in typewriting and office procedure. Prerequisite: Secretarial Training 1A.

Spring (2).

170. Administration of a Visual Instruction Program.

EVANS

Supervised study and practical experience in the various phases of work in a visual instruction center. Aims to give teachers a specific knowledge of visual instruction materials and methods and to meet the needs of individuals interested in obtaining training in the administration phases of a visual instruction program to fit them for positions as directors or staff workers in the field.

The service program of a visual instruction center is studied as a collecting, selecting, organizing and distributing center for classroom illustrative materials; a teacher training and advisory bureau in the technique and correct use of visual aids; a photographic production

laboratory for making current and local illustrative materials for the curriculum; a testing division for evaluating visual equipment, standardization and upkeep of same; a center for correlating and integrating the school program with opportunities offered by other community educational institutions and organizations; an advisory department for supervising school film productions and for instructing teachers and students in the art of photography and appreciation of photoplays.

This course is given at the visual education center of the San Diego city schools and the enrollment is limited to students who have made previous arrangements with the head of the Education Department and with the instructor.

Fall and Spring (2).

199. Educational Problems.

EDUCATION STAFF

(Dean of Education in Charge)

A course for senior students in teacher training who have shown ability to work independently on educational problems. Admission only by consent of the staff. Credit and hours to be arranged.

Fall and Spring (1-3).

ENGLISH

Lower division preparation for the presecondary major in English and for the junior certificate: English 1B-2A and six units from 52A, 52B, 56A, 56B.

Presecondary major (upper division): 24 units in upper division English to be selected and arranged under supervision of the department. Not over four units may be in composition. A reading knowledge of German or French.

LOWER DIVISION COURSES

1A. Freshman English.

ADAMS, KEENEY

The elements of composition, including drill in grammar and usage, exercises in vocabulary building and careful reading, and an introduction to the principles of effective writing.

Fall and Spring (1).

1B. Freshman English.

ADAMS, KEENEY, ROGERS, F. L. SMITH, F. D. WALKER

Reading and Composition. Reading chosen from essay material of England and America since 1850. Composition stressing exposition. Prerequisite: English 1A or equivalent (as indicated by Subject A test or record from other college).

Fall and Spring (3).

2A. Sophomore English.

F. D. WALKER

Reading and Composition. Reading from field of biography and memoirs. Composition stressing personal narrative and informal essay. Prerequisite: English 1B.

Fall and Spring (3).

2B. Sophomore English.

ADAMS

Reading and Composition. Reading from contemporary periodical literature. Composition stressing article writing of varied types. Prerequisite: English 1B.

Fall and Spring (2).

4A-4B. Great Books.

OUTCALT

A survey of books and bodies of literature that are significant sources or expressions of European and American culture. These include the Hebrew Bible, Greek Epic and Tragedy, Norse Eddas, and other literature of religious and communal character; and highly significant masterpieces in poetry and prose by great authors down to the nineteenth century.

Year course (3-3).

10. Recreational Reading.

F. L. SMITH

Development of personal tastes for leisure time reading through lectures and oral or written reports. May be taken a second time with new material.

Fall and Spring (1).

52A-52B. Types of Literature.

OUTCALT

Semester I: Introduction to the study of lyrical and narrative poetry; origin and elements of poetry; typical poems. Semester II: Introduction to the study of dramatic poetry and prose, the essay, novel and short story; elements, principles and characteristics; examples.

Year course (3-3).

56A-56B. Survey of English Literature.

KEENEY, ADAMS

The most important masterpieces of English literature from the Anglo-Saxon period through the Victorian age.

Year course (3-3).

UPPER DIVISION COURSES

101. Modern Prose Fiction.

F. L. SMITH

Recent and contemporary fiction in novel and short story, beginning with Meredith and including the best British and American fiction of today.

Spring (3).

106A, 106B. Advanced Composition.

F. L. SMITH

A laboratory course in modern prose writing. Semester I: Artistic narrative, with description. The short story. Semester II: The essay, the magazine article, criticism. Outside readings. Prerequisite: One year of college composition. Either semester may be taken first.

Fall, Spring (3, 3). (Not offered in 1934-1935.)

107A, 107B. Advanced Composition.

ADAMS

These courses, which have the same requirements as 106A, 106B, are designed for students who wish to do independent work in composition. The discussions will consider the problems of effective expression as

exhibited in the work of the members of the class. Either semester may be taken first.

Fall, Spring (2, 2).

110. Recreational Reading.

F. L. SMITH

An advanced course similar in character to English 10.

Fall and Spring (1).

116. Elizabethan Literature.

ADAMS

An introduction to the principal writers from Wyatt and More to Johnson and Bacon. Approximately equal attention is given to the non-dramatic poetry, the prose, and the drama of the period.

Fall (3). (Offered in even-numbered years.)

117. Shakespeare.

OUTCALT

Extensive reading of Shakespeare's plays, with special attention to a select group of the comedies and another of the tragedies. Lectures and special reports.

Spring (3).

118. Makers of Eighteenth Century Literature.

KEENEY

Pope, Defoe, Swift, Johnson, Goldsmith, Fielding, and their contemporaries as interpreters and teachers of their age.

Spring (3).

119. The Romantic Poets.

ADAMS

A study of early nineteenth century poetry; the work of Wordsworth, Coleridge, Byron, Shelley, and Keats, in relation to the thought of the revolutionary period.

Spring (3).

121. Poetry of the Victorian Period.

F. D. WALKER

A study of Tennyson and Browning and their contemporaries and successors, relating English poetry to nineteenth century life and thought.

Fall (3). (Offered in odd-numbered years.)

126. Anglo-Irish Prose from Landor to Galsworthy.

F. L. SMITH

Discussion, criticism, belle-lettres in England and Ireland from the Victorians to the late Georgians, including selections from Carlyle, Mill, Huxley, Newman, Stevenson, Pater, Shaw, Russell, West, Beerbohm, Chesterton, Inge, and others. Lectures and reports on outside reading.

Fall (3).

130A. American Literature.

OUTCALT

A survey of American Literature with its backgrounds from the beginning of the 19th century to about 1890. Cooper, Melville, Hawthorne, Poe, Emerson, Thoreau, Whitman, Mark Twain and others are considered and related to national development. Lectures, discussions, and reports.

Fall (3).

130B. American Literature.

F. D. WALKER

A survey of American literature with its backgrounds, covering the period from about 1890 to the present time. Extensive reading in recent and contemporary poetry, fiction, etc. Lectures, discussions and reports.

Spring (3).

143. The Development of the English Novel.

F. D. WALKER

History of the English novel from the beginnings to Hardy. Extensive reading of novels with reports. Lectures and discussion.

Fall (3). (Offered in even-numbered years.)

151. Medieval Literature.

KEENEY

The literature of the fourteenth century, especially the verse romances and the poetry of Chaucer.

Fall (3).

160. Milton and Dryden.

ADAMS

Studies in the poetry of the seventeenth century, relating it to the thought and the social life of the age.

Fall (3). (Offered in odd-numbered years.)

Speech Arts

LOWER DIVISION COURSES

1A. Elements of Public Speaking.

PFAFF

Training in fundamental processes of oral expression; methods of obtaining and organizing material; outlining principles of attention and delivery; extemporaneous speaking and open forum debating; practice in construction and delivery of type forms of speech.

Fall and Spring (3).

1B. Extemporaneous Speaking (or Forum Speaking).

PFAFF

Practice in extemporaneous speaking on subjects of current interest both national and local, with stress laid on the organization and delivery of content material. Forum discussion will provide speakers with the opportunity of assembling facts quickly to meet such questions as any audience situation might demand.

Spring (3).

1C. Oral Interpretation.

PFAFF

The oral interpretation of longer literary selections, both in poetry and prose; designed to assist the beginning student in drama as well as the student majoring or minoring in English literature.

Fall (3).

1D. Advanced Interpretation.

PFAFF

Emphasis placed on stage poise and grace with adequate attention given to variations in the presentation of literary selections. Much opportunity is provided for individual and group creative work. No prerequisite. Class limited.

Spring (3).

20. Vocal Production.

PFAFF

Corrective laboratory training prescribed on the basis of vocalization tests made on Edison machine. Required of education majors who fail to meet speech requirements test. Also recommended for those who plan public careers.

Fall and Spring (1).

UPPER DIVISION COURSE

101B. Argumentation and Debate.

PFAFF

Obtaining and organizing of evidence and the construction and use of the brief; study and discussion of current issues; the presentation of formal and informal debates. Attention to intramural and intercollegiate debating.

No credit for students having taken 1B previous to 1934-1935.

Spring (3).

JOURNALISM

(See page 92)

FOREIGN LANGUAGES

Lower division preparation for advanced work in a foreign language and for the junior certificate: Sixteen units of credit in the language chosen for the major. Recommended: History 4A-4B.

Lower division preparation for the presecondary group major in the Romanic languages: French A-B, C-D, and Spanish A-B, C-D.

The group major requirements are based on the assumption that the student will have taken courses in the high school equivalent to the college course in elementary French or Spanish.

Presecondary group major (upper division). Eighteen upper division units in one language or twelve units in one language and six units in the other, taken in the junior and senior years, with at least a C average in all courses.

French

LOWER DIVISION COURSES

A-B. Elementary.

E. M. BROWN, PHILLIPS

Intensive study of French grammar and syntax; daily written work discussed in class; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of French prosody, with memory work. Credit not given for French A unless followed by French B. Students who have had one year of French in high school should register for French A, but will receive only two units of credit. Those who have had two years of French in high school should register for French B, in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

E. M. BROWN, L. P. BROWN, PHILLIPS

Reading and composition; study of standard prose as a basis for class work; collateral reading with résumés and written reports in French;

study of French prosody, with selections for memorizing; dictation. Class work conducted mainly in French. Individual conferences. Prerequisite: French B or three years of high school French, or its equivalent. Students with credit for four years of high school French, or its equivalent, should enter French D.

Year course (3-3).

SC. Scientific.

L. P. BROWN

Readings taken from the fields of chemistry, physics, medicine, zoology, biology, etc. Outside readings of books and periodicals. Oral and written reports.

Fall (2). (Offered in 1935-1936.)

UPPER DIVISION COURSES

101A-101B. Conversation and Composition.

E. M. BROWN

Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3).

105A-105B. Modern French Drama.

E. M. BROWN

Plays of Musset, Scribe, Augier, Dumas fils, Pailleron, Brieux, Hervieux, Maeterlinck, Rostand, and others read and discussed as to subject matter and technique. Outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Offered in 1937-1938.)

107A-107B. Eighteenth Century Literature.

L. P. BROWN

The philosophical ideas of the century as contained in the works of Montesquieu, Voltaire, and Rousseau. The *Encyclopédistes*. Prerequisite: French D, or its equivalent, with a grade of C.

Year course (3-3). (Offered in 1936-1937.)

110A-110B. Modern French Novel.

E. M. BROWN

The French novel from Victor Hugo to the present day, including such authors as: Hugo, Dumas, Stendhal, Balzac, Flaubert, Loti, Anatole France, Bourget, Bordeaux, Bazin, Barres, Romain Rolland, A. Gide, Marcel Proust, and others. Class and outside reading and reports. Prerequisite: French D, or its equivalent, with grade of C.

Year course (3-3). (Offered in 1935-1936.)

111A-111B. Seventeenth Century Dramatic Literature.

E. M. BROWN

Reading in class of plays of Molière, Corneille, and Racine. Outside readings and lectures on the background of the seventeenth century in France. Prerequisite: French D, or its equivalent, with a grade of C, and upper division standing.

Year course (3-3).

German

LOWER DIVISION COURSES

A-B. Elementary.

H. K. WALKER

Pronunciation, reading and grammar, with practice in simple conversation, narration and description, both oral and written. Credit not given for German A unless followed by German B. Students who have had one year of German in high school should register for German A, but will receive only two units of credit. Those who have had two years of German in high school should register for German B, in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

H. K. WALKER

Reading and composition; study of standard prose as basis for class work; collateral reading with written reports; German conversation, with the texts read as a basis; dictation. Prerequisite: German B or three years high school German, or its equivalent. Students with credit for four years high school German, or its equivalent, should enter German D.

Year course (3-3).

SC-SD. Scientific.

H. K. WALKER

Fall semester. Readings in scientific reader on chemistry, physics, etc.; occasional written reports on scientific subjects read outside of class; sight reading. Spring semester. Readings in special scientific or technical works; weekly written reports required; sight reading. Prerequisite: German SC-German B with a grade of C or three years of high school German; German SD-German C with a grade of C or four years of high school German.

Year course (2-2). (Offered in 1935-1936.)

Spanish

LOWER DIVISION COURSES

A-B. Elementary.

L. P. BROWN, PHILLIPS

Intensive study of Spanish grammar and syntax, with daily written work; class drill in conversational idiom and pronunciation; reading with oral discussion and résumés; dictation; introduction to contemporary prose writers; study of the principles of Spanish prosody, with memory work. Credit not given for Spanish A unless followed by Spanish B. Students who have had one year of Spanish in high school should register for Spanish A, but will receive only two units of credit. Those who have had two years of Spanish in high school should register for Spanish B, in which case they will receive four units of credit.

Year course (5-5).

C-D. Intermediate.

PHILLIPS

Reading and composition; study of standard prose as basis for class work; collateral reading in prose and drama, with written reports in Spanish; a study of Spanish prosody, with selections for memorizing;

dictation. Class work conducted mainly in Spanish. Individual conferences. Prerequisite: Spanish B or three years of high school Spanish, or its equivalent. Students with credit for four years of high school Spanish, or its equivalent, should enter Spanish D.

Year course (3-3).

UPPER DIVISION COURSES

101A-101B. Conversation and Composition.

PHILLIPS

Prerequisite: Spanish D, or its equivalent, with grade of C.

Year course (3-3). (Offered in 1935-36.)

102A-102B. Introduction to Spanish Classics.

L. P. BROWN

Reading from several types of classical literature. Lazarillo de Tormes, and other novels of Roguery; selections from Don Quixote, and the Cien Mejores Poesias Castellanas; one drama each from the works of Lope de Vega, Calderon, Alarcon, and Moreto; collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3).

104A-104B. Spanish-American Literature.

PHILLIPS

A survey of the whole field of Spanish-American literature during the colonial, revolutionary and modern periods, with special attention during the second semester to the literature of one country. Collateral reading and reports. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Offered in 1936-1937.)

105A-105B. Modern Spanish Drama.

L. P. BROWN

The development of the drama of Spain from the beginning of the nineteenth century to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Offered in 1935-1936.)

110A-110B. Novel and Short Story in Spain.

L. P. BROWN

The development of the novel and short story in Spain from 1830 to the present time. Prerequisite: A grade of C in Spanish D or permission from the instructor.

Year course (3-3). (Offered in 1937-1938.)

General Language

LOWER DIVISION COURSE

A. Latin and Greek Word Derivation.

L. P. BROWN

A general and elementary course in philology. A study of Latin and Greek roots of most frequent occurrence in English, and of the English words derived from them. Not open to first semester freshmen.

Spring (2).

GEOGRAPHY

Lower division preparation for the presecondary major in geography and for the junior certificate; Geography 1, 2, 3, and Geology 1A-1B. Recommended: A reading knowledge of French or German.

Presecondary major (upper division): Twenty-four units of upper division work in geography or 18 units in geography and six units in related subjects arranged in consultation with the chairman of the department.

LOWER DIVISION COURSES

1. Introduction to Geography; Elements. BROOKS, CLARK, SUHL

The fundamental principles of geography, the distribution of life upon the earth, and the effects of environment upon the activities of man. Climate, land forms, bodies of water, natural resources, and location in their relation to human activities. Open to all students.

Fall and Spring (3).

2. Introduction; Natural Regions and the Distribution of Population and of Cultures. CLARK, SUHL

The application of the fundamental principles of geography to the various regions of the world. Comparison of regions with regard to different stages of development. Prerequisite: Geography 1.

Fall and Spring (3).

3. Elementary Meteorology.

An elementary study of the earth's atmosphere and changes in it which produce our weather and influence human affairs. Special attention given to local conditions, instruments, and records.

(3).

UPPER DIVISION COURSES

116. Geography of South America. CLARK

The climate, topography, and natural resources of the South American countries; the effect of those physical factors upon the economic, commercial, and racial problems of the different nations. Prerequisite: Geography 1.

Spring (3).

117. Geography of Northwestern Europe. CLARK

The physical environment of each of the nations of the area and their reactions to physical environment in their political and social relations. Importance of the countries in manufactures. This course is planned so to familiarize the student with modern European countries that he can read current periodical literature with understanding and interest. Prerequisite: Geography 1.

Fall (3).

118. Geography of the Mediterranean Area. CLARK

A treatment of Southern Europe, Western Asia, and Northern Africa as a unit and a comparison of the land forms, climates, types of native

vegetation, cultivated crops, industrial status, and present world position; also the effect of geographic factors on the history of the area. Prerequisite: Geography 1.

Spring (3).

121. Geography of North America

SUHL

The natural regions of North America, their formation and economic and historical development. Prerequisite: Geography 1.

Fall (3).

124. Geography of Asia.

SUHL

The cultural regions of Asia, their physical environment, and historical development. Prerequisite: Geography 1.

Spring (3).

135A. Geography of the San Diego Area: Rural.

CLARK

Directed field work within the county designed to familiarize prospective teachers with the local area or field work and mapping of a small area and its geographic interpretation. Prerequisites: Geography 1 and 2.

Spring (2).

135B. Geography of the San Diego Area: Urban.

SUHL

Directed field work within the city designed to aid in teaching this region or directed field work in the analysis of urban evolution. Prerequisites: Geography 1 and 2.

Fall (2).

141. Economic Geography.

SUHL

A world-wide survey of the raw materials of world trade; their production and distribution as related to the major geographic regions of the world. Prerequisites: Geography 1 and 2.

Fall (3).

GEOLOGY

LOWER DIVISION COURSES

1A. General.

BROOKS

Materials of the earth; their composition, distribution, and modification through processes both mechanical and chemical, operating upon and within the earth, with the production of varied surface conditions. Three lectures and one two-hour laboratory period weekly.

Fall and Spring (3).

1B. Historical.

BROOKS

Geological history of the earth from time of probable origin to the present as interpreted through lithologic and paleontologic sequence, with especial attention to North America as illustrative of earth chronology. Three lectures and one two-hour laboratory period weekly. Prerequisite: Geology 1A.

Spring (3).

UPPER DIVISION COURSES

100. Physical Geology.

BROOKS

The evolution and description of structural and topographic features of the earth. Lectures, discussions, and problems. Prerequisite: Geology 1A.

Fall (3).

101. Geologic Problems.

BROOKS

Directed reading from a prepared syllabus introducing the several phases of geologic literature; or geologic reconnaissance of adjacent areas with elementary mapping; or selection and preparation of materials for the departmental collections. Prerequisite: Geology 1A-1B. Registration subject to approval of instructor.

Spring (1-4).

GERMAN

(See Foreign Languages)

HEALTH AND PHYSICAL EDUCATION

(See Physical Education)

HISTORY

Lower division preparation for the presecondary major in history and for the junior certificate: History 4A-4B, or 8A-8B, and either Political Science 1A-1B, Economics 1A-1B, or Geography 1 and 2. No student shall enroll in more than one lower division history course during a semester. Students who wish to major in history and who have had less than two years of European history in high school must take History 4A-4B.

Presecondary major (upper division): Twenty-four units in upper division courses in history to be arranged in consultation with the chairman of the department. The student must, in his senior year, enroll in History 199.

LOWER DIVISION COURSES

4A-4B. History of Modern Europe.

LESLEY

Development of European society and institutions from about 1500 A.D. to the present time.

Year course (3-3).

8A-8B. History of the Americas.

NASATIR

A general survey of the history of the western hemisphere from the discovery to the present time. Emphasis on the process of planting European civilization in the new world, the international contest for the continents, the wars for independence, the development of the American republics, and their relations with each other and with the rest of the world. Based on H. E. Bolton's "Syllabus of the History of the Americas."

Year course (3-3).

UPPER DIVISION COURSES

111A-111B. Ancient History.

LESLEY

Semester I: Social, economic, political, and cultural development of the Greek states with emphasis upon the growth of democracy, attempts at federal union, imperialism, and Hellenism. Semester II: Roman history from the earliest times to the beginning of the medieval period: discussions of Roman imperialism and the main constitutional, economic, social, and religious developments in the republic and the empire.

Year course (3-3). (Not offered in 1934-1935.)

121A-121B. Medieval History.

LESLEY

General survey of European politics and the cultural development of the Middle Ages; the antecedents of the Renaissance; development of medieval life and institutions, feudalism, the church, the universities, and intellectual tendencies. The rise of towns, of new nations, and of new thought, especially in the twelfth and thirteenth centuries. Period covered 500-1500 A.D.

Year course (3-3).

145A-145B. Europe Since 1789.

LESLEY

Revolutionary era; conflict of reaction and liberalism; development of nationalism, with special attention devoted to the unification of Germany and Italy; events leading up to the World War and contemporary problems of Europe resulting from that conflict.

Year course (3-3).

146A-146B. Diplomatic History of Europe.

LESLEY

European diplomatic and colonial policies since 1648, with detailed attention to the basic factors in international organization and procedure. During the second semester special emphasis upon the period 1870-1914.

Year course (3-3). (Not offered in 1934-1935).

151A-151B. England Since the Norman Conquest.

NASATIR

A survey of political and constitutional development in England since 1066, stressing the transition from medieval to modern England, Tudor despotism, the struggle for self-government under the Stuarts, the rise and development of present-day political and social institutions.

Year course (3-3).

156A-156B. History of British Expansion.

NASATIR

A study of the growth, development, and break-up of the older overseas empire; the beginnings of the newer empire after 1783; the rise, federation, and imperial relations of the self-governing dominions; the crown colony system; India under British rule; and British expansion in Africa and the Pacific.

Year course (3-3). (Not offered in 1934-1935.)

161. South America Since Independence.

NASATIR

A study of the republics of South America. Attention directed to the development of nationality in South America, the struggles for political stability, the exploitation of resources, diplomatic and commercial rela-

tions with the United States, and other international problems of South America. Survey of present-day conditions, political, economic, and social.

Spring (3).

163. Mexico and the Caribbean Countries.

NASATIR

Same plan in general as outlined in History 161. Special attention to the relations of the United States with these countries, and to the recent developments in Mexico.

Fall (3).

171A-171B. The Rise of the American Nation.

LEONARD

Semester I. English colonization in North America and the development of colonial institutions and politics. Semester II. The revolutionary movement and the Revolutionary War; the establishment of the government under the Constitution to the close of the War of 1812.

Year course (3-3).

173A-173B. The Expansion of the United States.

LEONARD

The rise of Jacksonian Democracy; territorial expansion and the Mexican War; the slavery controversy; the Civil War, and reconstruction; the growth and progress of the United States to the World War.

Year course (3-3). (Not offered in 1934-1935.)

199. Special Course for Advanced Students.

LEONARD

Required of all students with a history major in the presecondary curriculum and to be attended during the senior year. Other students may be admitted with the permission of the instructor.

Spring (2).

HYGIENE

LOWER DIVISION COURSES

1. Personal and Civic (Men).

C. E. PETERSON

An informational course in personal and community hygiene. A study of social hygiene and the hygienic principles of living. Investigations by each student of special topics which serve to vitalize the means for protecting and improving the health of the community. It is especially desirable that this course be taken in the first semester of the freshman year.

Fall and Spring (2).

2. Personal and Civic (Women).

TANNER

An informational course reviewing the principles underlying the improvement and preservation of personal and civic health. Social hygiene in its relations to the practical problems of young women and prospective home makers. The laws and procedures in local civic health matters of particular interest to women studied in detail. Reports following personal investigation of at least three major topics required of each member, these reports being given and discussed before the class. Required of all freshmen who are candidates for the junior certificate or the degree in the presecondary curricula.

Fall and Spring (2).

INDUSTRIAL ARTS

LOWER DIVISION COURSES

21. Descriptive Geometry.

WALLING

Fundamental principles of descriptive geometry and their application to problems of engineering. Lectures and drafting. Prerequisite: Mechanical Drawing, and sophomore standing.

Fall (3).

22. Machine Drawing.

WALLING

Design and drawing of simple machine parts with emphasis upon the production of standard drawings. Lectures and drafting. Prerequisite: Industrial Arts 21.

Spring (3).

23. Materials of Construction.

WALLING

Structural properties and adaptability of materials used in engineering. Lectures. Prerequisite: Sophomore standing.

Spring (2).

25. Elements of Electrical Engineering.

WALLING

Mathematical and descriptive consideration of electrical circuits together with a general survey of the electrical industry. Lectures. Prerequisite: Mathematics 4A.

Spring (3).

28. Elements of Heat Power Engineering.

WALLING

Fundamental consideration of fuels, combustion, steam, boilers, furnaces, chimneys, steam engines, steam turbines and auxiliaries, internal combustion engines. Lectures. Prerequisite: Mathematics 3B, Physics 1B. Primarily for engineering students other than mechanical or electrical.

Fall (3).

29. Elements of Radio Communication.

WALLING

Theory and characteristics of fundamental radio circuits. Theory and characteristics of the vacuum tube as detector, amplifier, and generator of alternating current power. Lectures. Prerequisites: Physics 1C, Mathematics 4A or enrollment in those courses.

Fall (3):

NOTE.—Both Industrial Arts 28 and 29 will not be given the same year. The course with the greater demand will be the one given.

JOURNALISM

Lower division preparation in journalism for advanced work and the junior certificate: History 4A-4B, or 8A-8B; Psychology 1A-4A; English Composition, 4 units; Secretarial Training 2A; Political Science 1A-1B or Economics 1A-1B; Journalism 51A-51B. Recommended: English Literature, 6 units; Speech Arts 1A-1B; Social Economics 50; Economics 18A-18B; Journalism 53A-53B.

For the profession of journalism introductory work in the fields of literature, history, political science, social science, economics, the arts, etc., is recommended.

The aim in the specialized courses in journalism is to offer introductory training in the principles and practices of journalistic writing only after a good foundation in correct speaking and writing English has been laid. Practical training in news reporting and editing for student publications and for the daily press is emphasized.

LOWER DIVISION COURSES

Journalism 51A-51B. News Gathering and Reporting. F. L. SMITH

Study of news sources and types; practice in news writing; newspaper organization; excursions and special lectures. Course planned for sophomores who have had English 1A-1B, with high school Journalism or equivalents.

Year course (3-3).

Journalism 53A-53B. Applied Journalism. F. L. SMITH

Credit earned for editorial or other staff work throughout a full semester on student publications such as *The Aztec*, *El Palenque*, *Del Sudoeste*.

Fall and Spring (1 to 3-1 to 3).

UPPER DIVISION COURSES

Journalism 100. News and Manuscript Editing. F. L. SMITH

Practice in copy reading, proof reading, headline writing, and newspaper makeup. Study of editorial pages. Prerequisite: Journalism 51A-51B or equivalent in composition.

Spring (3). (Not offered in 1934-35.)

Journalism 153A-153B. Advanced Journalism Practice. F. L. SMITH

Upper division work of the same type as that in 53A-53B, but with advanced requirements.

Fall and Spring (1 to 3-1 to 3).

NOTE.—Not more than six units in all will be given for journalism practice on student publications.

MATHEMATICS

Lower division preparation for the presecondary major in mathematics and for the junior certificate: Mathematics 3A-3B, 4A-4B. With permission of the department, 7A-7B may replace 3A-3B. Recommended: Physics, Surveying, Descriptive Geometry, Astronomy and a reading knowledge of French and German.

Presecondary major (upper division): Twenty-four units of upper division work in mathematics, or 18 units in mathematics and six units in closely related subjects, arranged in consultation with the chairman of the department. Mathematics 111, 112, and 119 should be included in every major. Related courses offered by other departments include Statistical Methods (Economics 140), Mathematics in the Junior High School (Education 112), and certain upper division courses in chemistry and physics.

LOWER DIVISION COURSES

1. Elementary Functions.

GLEASON

Algebra, numerical trigonometry, functions and graphs. Prerequisites: Plane geometry and one year of high school algebra.

Spring (3).

2. Mathematics of Investment.

WRIGHT

Interest and annuities; amortization; sinking funds; valuation of bonds; depreciation; mathematics of building and loan associations; mathematics of life insurance. Prerequisites: Mathematics 1, or trigonometry and two years of algebra in high school, or equivalent.

Fall (3).

3A-3B. Analytic Geometry and Calculus.

LIVINGSTON, WALLING

Analytic geometry and differential calculus, together with an introduction to the integral calculus. Prerequisites: Trigonometry, plane and solid geometry, and two years of algebra in high school.

Year course (3-3).

4A-4B. Intermediate Calculus.

GLEASON, LIVINGSTON

Integration, partial differentiation, infinite series and introduction to differential equations. Prerequisite: Mathematics 3A-3B, or a high grade in 7A-7B.

Year course (3-3).

7A-7B. Introduction to Analysis.

LIVINGSTON

Trigonometry, analytic geometry, differential calculus, introduction to integral calculus. Prerequisites: Plane geometry and one and one-half years of high school algebra.

Year course (4-4).

10. Appreciation and History of Mathematics.

THE STAFF

Recreational reading in the history and philosophy of mathematics. Spring (2). (Not offered in 1934-1935.)

19. Foundations of Arithmetic.

GLEASON

A connected idea of the subject of arithmetic. Beginning with counting, the number system is developed and the four fundamental operations extended accordingly. Applications are made in the fields of commerce and science. Prerequisite: Sophomore standing.

Fall (3).

UPPER DIVISION COURSES

102. Elementary Algebra for Advanced Students.

GLEASON

Selected topics viewed from the standpoint of higher mathematics. Prerequisites: Introductory courses in analytic geometry and calculus.

Fall (3).

104. History of Mathematics.

GLEASON

A nontechnical course open to students who have some knowledge of the fundamental ideas of mathematics.

Fall (3). (Not offered in 1934-1935).

105. Modern Geometry.

LIVINGSTON

The geometry of the circle and the triangle. Prerequisite: Mathematics 3A-3B or 7A-7B.

Fall (3). (Not offered in 1934-1935.)

106. Projective Geometry.

LIVINGSTON

The construction and study of conic sections by means of perspectives, poles and polars, and involutions. Prerequisite: Mathematics 105, or permission of the instructor.

Spring (3). (Not offered in 1934-1935.)

111. Theory of Equations.

LIVINGSTON

General solutions of algebraic equations; approximate numerical solutions; applications. Prerequisite: Mathematics 3A-3B or 7A-7B.

Fall (3).

112. Analytic Geometry of Space.

LIVINGSTON

Planes, lines, and quadric surfaces. Prerequisite: Mathematics 111, or permission of the instructor.

Spring (3).

119. Differential Equations.

GLEASON

Ordinary differential equations of first and second order, with applications. Prerequisite: Mathematics 4B or permission of instructor.

Spring (3). (Not offered in 1934-1935).

124. Vector Analysis.

GLEASON

Vector analysis and allied topics with applications to geometry and mechanics. Prerequisite: Mathematics 4B, or permission of instructor.

Spring (3).

MUSIC

For course in preparation for Public School Music teaching, refer to curriculum in Music Education, page 40.

Lower division preparation for the presecondary major in music and for the Junior certificate: Music 1A-1B, 2A-2B, 4A-4B, and two units of electives in music. The electives in both lower and upper division must include at least six units in Applied Music (study of voice, or an instrument), of which at least three units must be in piano. Upper division credit will not be given for beginning work in Applied Music. (For restrictions on applied courses, see page 49.

Presecondary major (upper division): Music 103A-103B, 105A-105B, 107A-107B, 108, and 12 units of upper division elective courses in music. (See statement concerning Applied Music under lower division requirements.)

For information regarding majors and minors in music, and other details not found here, consult the Music Education Adviser.

LOWER DIVISION COURSES

1A. Music Reading and Ear Training—Fundamentals of Music.

BEIDLEMAN, L. D. SMITH, SPRINGSTON

Elementary music theory; scale construction; drill in music reading both with syllables and with words; ear training, elementary music dictation; the elements and materials of music. Basic course used as prerequisite for all advanced music work and for the courses in music education. Text—Gehrken's: Fundamentals of Music. Students majoring in music may be exempted from this course by examination.

Fall and Spring (2).

1B. Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, sight singing with Latin syllables and with words. Text—Wedge: Ear Training and Sight Singing. Prerequisite: Music 1A, or the equivalent.

Spring (2).

1C-1D. Advanced Music Reading and Ear Training.

L. D. SMITH

Tonal and rhythmic dictation, rhythmic writing, and sight singing in two and three parts. Text—Wedge: Advanced Ear Training and Sight Singing. Prerequisite: Music 1A-1B.

Year course (2-2).

1E. Advanced Music Reading and Ear Training.

L. D. SMITH

Advanced tonal and rhythmic dictation, rhythmic writing, and sight singing in two, three, and four parts. Prerequisite: Music 1C-1D.

Fall (2). (Offered in odd-numbered years.)

2A-2B. Appreciation and History of Music.

SPRINGSTON

How and of what music is made. How to listen to, enjoy, and appreciate it. The development of music from the earliest times, with a particular effort to gain some acquaintance with the music of the various periods and composers by listening to examples of it. Illustrated with numerous phonograph records. A general fundamental, and nontechnical course, requiring no previous musical training or background.

Year course (2-2).

4A-4B. Elementary Harmony.

SPRINGSTON

Scale construction, intervals, chords, structure, modulation, through various types of seventh chord. Especial attention is paid to the keyboard application of problems in harmonization, transposition, and modulation. Prerequisites: Music 1A, or the equivalent, and at least one year of piano study.

Year course (3-3).

19. Instrumental Ensemble.

BEIDLEMAN

The practice and performance of music for small groups of string, wind, and brass instruments.

Fall and Spring ($\frac{1}{2}$)

20. Vocal Ensemble and Chorus.

L. D. SMITH

A general course open to all students but one which may be offered by music students toward satisfying the requirement in vocal ensemble. Mixed harmony in two, three, and four parts; voice quality; phrasing, interpretation, and enunciation considered in detail; study of song material suitable for junior and senior high school.

Fall and Spring (1).

UPPER DIVISION COURSES

103A-103B. Appreciation and History of Music—Great Music.

SPRINGSTON

Study of the great masterpieces of music in the larger forms, by means of phonograph records and scores. Prerequisite: Music 2A-2B, or 4A-4B, or equivalent.

Year course (1-1).

105A-105B. Advanced Harmony.

BEIDLEMAN

Completion of harmonic theory; modulation, inharmonic tones, etc. Continuation of harmonic analysis, and keyboard harmony. Melody writing. Prerequisite: Music 4A-4B.

Year course (3-3).

107A. Conducting.

BEIDLEMAN

The technique of the baton. Methods and materials for use in directing choral organizations. Prerequisite: Music 1A-1B, or 4A-4B.

Fall (1).

107B. Conducting (Instrumental).

BEIDLEMAN

Theory and practice of instrumental conducting, with study of materials and methods. Taught in conjunction with, and requiring participation in, Instrumental Ensemble (Music 119). Prerequisite: Music 107A.

Fall and Spring (1).

108. Instrumentation.

BEIDLEMAN

Theory and practice of arranging music for instrumental combinations. Prerequisite: Music 4A-4B.

Spring (2).

110A-110B. Piano Class Principles.

SPRINGSTON

Materials and methods used in piano classes in the elementary schools. Prerequisite: At least two years of piano study.

Year course (1-1), beginning either semester.

119. Instrumental Ensemble.

(See Music 19.)

BEIDLEMAN

120. Vocal Ensemble and Chorus.

(See Music 20.)

L. D. SMITH

MUSICAL ORGANIZATIONS

- 11 or 111. Treble Clef (Women's) Glee Club.** L. D. SMITH
Membership based on competitive try-outs.
(1-1).
- 12 or 112. Men's Glee Club.** BEIDLEMAN
Membership based on competitive try-outs.
(1-1.)
- 13 or 113. Orchestra.** BEIDLEMAN
(1-1.)

Applied Music

Credit for applied music is available only for students majoring in music, and is subject to special permission and arrangement.)

- 15 or 115. Stringed Instruments.**
- 16 or 116. Wind Instruments.**
- 17 or 117. Voice.**
- 18 or 118. Piano (Organ).**

PHILOSOPHY

LOWER DIVISION COURSES

- 5A. Introduction to Philosophy.** STEINMETZ
Elementary orientation; the persistent problems of philosophy, especially in epistemology, metaphysics, and ethics; the Republic of Plato, and social systems. Prerequisite: Sophomore standing or consent of instructor.
Fall (3).

- 5B. The Philosophy of Science.** STEINMETZ
The problems of philosophy systematized according to related sciences; their achievements and perplexities; politico-economic movements; technology in modern civilization. Prerequisite: Philosophy 5A, except that sophomores planning to major in natural science may be admitted without prerequisite.
Spring (3).

UPPER DIVISION COURSES

- 105B. The Philosophy of Science.** STEINMETZ
Same as Philosophy 5B, save that upper division students will be held to more exacting contribution.
Spring (3).
- 120. Logic, and Philosophy of Mind.** STEINMETZ
Formal and functional logic; examination of reflective procedures in various fields; epistemological assumptions and traditional viewpoints,

especially as illustrated in recent scientific writings; review of some psychological, experimentally supported explanations of thought. Prerequisites: Psychology 1A and Philosophy 5A.

Spring (3). (Offered in even-numbered years.)

PHYSICAL EDUCATION

Men's Department

A two-hour activity course each semester is required for the two years of lower division. A medical examination is given each student when entering and the work is fitted, as far as possible, to his needs. Physical efficiency tests are given at the beginning in order to classify the student as to his physical ability. The content of the required two years is planned to give each student fundamental training in those sports which have carry-over value into after life. Opportunity is given all students to take part in the regular competitive sports program.

LOWER DIVISION COURSES

1A-1B. Freshman activity.

Year course, beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

1C-1D. Sophomore activity.

Year course, beginning either Fall or Spring ($\frac{1}{2}$ - $\frac{1}{2}$).

Class sections are so arranged that the student may choose the activity he is most desirous of learning. Fundamentals of the sports listed are taught during the class hour. Each student must choose different activities for three of the four semesters required.

2A or B. Golf. Spring ($\frac{1}{2}$).

3A or B. Track. Spring ($\frac{1}{2}$).

4A or B. Baseball. Spring ($\frac{1}{2}$).

5A or B. Basketball. Spring ($\frac{1}{2}$).

6A or B. Tennis. Fall and Spring ($\frac{1}{2}$).

7A or B. Boxing. Fall and Spring ($\frac{1}{2}$).

8A or B. Wrestling. Fall and Spring ($\frac{1}{2}$).

9A or B. Fall Track. Fall ($\frac{1}{2}$).

10A or B. Swimming. Spring ($\frac{1}{2}$).

11A or B. Fencing. Fall and Spring. ($\frac{1}{2}$).

13A or B. American Football. Fall ($\frac{1}{2}$).

14A or B. Gymnastics. Spring ($\frac{1}{2}$).

The following courses fulfill degree requirements for physical education majors and meet state requirements for teaching credentials in physical education.

54. Administration of Physical Education.

GROSS

The problems that arise in the everyday experience of the instructor in physical education, such as policies in administration, classification of students, administration of activities, organization of the leadership of students, arrangement and care of the physical equipment, personal relationships with students, interdepartmental adjustments, rolls, records and reports. Material presented in latest State Department Manual used as basis.

Fall and Spring (2).

62A. Gymnastic Activities.

C. E. PETERSON

Theoretical and practical work in marching, free exercises, and light and heavy apparatus. Emphasis on progression and method of presenting material. The simplest and most explanatory terminology. Prerequisite: Sophomore standing.

Fall (2).

62B. Gymnastic Activities.

C. E. PETERSON

Acquisition of proficiency in the performance of a great group of gymnastic stunts always popular in the gymnasium and on the playground. Work of the recreational or self-interesting type rather than the formal. Tumbling, stunts, and pyramid building given chief attention, although games of low organization are also considered. Prerequisite: Sophomore standing.

Spring (2).

UPPER DIVISION COURSES

101. Emergencies.

GROSS

The accepted procedure in meeting the emergencies which daily arise in schoolroom, play or athletic field, beach, mountains, or any of the many places where the physical director is called on for first aid. Special attention given to the arrangement of the apparatus and the activities so that many of the most common accidents are prevented or minimized.

(1)

151. Health Education.

(See Women's Department.)

Fall and Spring (2).

155. Applied Anatomy.

C. E. PETERSON

Mechanics of the human skeletal and muscular systems and their actions in games, formalized activities, and general body movements; mechanical strength and durability as influenced by anatomical factors.

(2). (Offered in alternate years.)

156A. Sports Methods.

C. E. PETERSON AND STAFF

Different theories and methods of teaching the more highly organized sports: baseball, basketball, tennis, and track.

Fall (2).

156B. Sports Methods.

C. E. PETERSON AND STAFF

Methods of teaching those sports most adaptable to intramural and interclass competition: golf, handball, soccer, speedball, and volley ball.

Spring (2).

166. Technique of Officiating.

GROSS

Methods of officiating all the sports common to the school or college program; also methods of training student officials. Practice in the handling of elementary, junior high, high school, and interclass college competition.

Fall (1).

169. Technique of Teaching Activities.

PHYSICAL EDUCATION STAFF

Directed leadership in activities. A course preliminary to practice teaching in which students are given opportunity to develop leadership and teaching technique.

Spring and Fall (1½ or 3).

171. Community Recreation.

C. E. PETERSON

Planned to meet the needs of the various workers in community playground systems apart from schools, as well as the needs of directors of play and recreation in social service institutions, industrial plants, shops, and factories. Special attention given to scout and campcraft.

Spring (2).

172. Principles of Physical Education.

HERREID

The material which seeks to establish the place of physical education and to indicate its indispensable character in modern life.

Fall (2). (Offered in alternate years.)

179. Physical Education Tests and Measurements.

(2).

180. American Football.

HERREID

Theory and practice of individual and team play. Each student taught the fundamentals of football. Two hours of lecture and three hours of laboratory.

Fall (2).

PHYSICAL EDUCATION

WOMEN'S DEPARTMENT

All new students are given a medical examination to the end that the physical needs of each student may be determined and her work planned accordingly. Two hours weekly of directed physical activity are required in freshman and sophomore years. Emphasis is upon rhythmic activities, games, and sports. In order to meet this requirement, students taking the curriculum leading to the A.B. degree with an elementary credential must take Physical Education 36A-36B, 37, and 38A. Those seeking the junior certificate or the degree in any of the presecondary curricula or the degree with the junior high school credential or with a special credential in art, commerce, or music, are required to take the Physical Education 36A-36B, 38A-38B.

LOWER DIVISION COURSES

36A. Rhythmics, Group Games, Stunts. TANNER

Fall and Spring ($\frac{1}{2}$).

36B. Athletic Games.

Fall and Spring ($\frac{1}{2}$).

37. Game and Rhythmic Activities. TANNER

Prerequisite: Physical Education 36A-36B.

Fall and Spring ($\frac{1}{2}$).

38A. Recreational Activities (Elective). TANNER

Dancing, folk dancing, rowing, stunts, golf, horseback, swimming, tennis, or seasonal sports.

Fall and Spring ($\frac{1}{2}$).

38B. Recreational Activities (Elective). TANNER

Golf, horseback, swimming, tennis, or seasonal sports: or any one of the following that was not chosen in Physical Education 38A; dancing, folk dancing, rowing, or stunts.

Fall and Spring ($\frac{1}{2}$).

53. Physical Education in the Elementary School. TANNER

Physical education problems, administration of tests, methods of classifying children for play activities, developing leaders, and carrying on intramural ideals. Particular attention given posture problems. The content of the state program in physical education forms the basis of the course. Prerequisite: Physical Education 37 must precede or accompany.

Fall and Spring (2).

***55. Swimming.**

A. Beginning or intermediate ($\frac{1}{2}$).

B. Red Cross Life Saving Test ($\frac{1}{2}$).

Required of all freshmen women majoring in physical education.

***56. Tennis.**

Required of all sophomore women majoring in physical education. Tests given on playing skills and knowledge of teaching technique.

($\frac{1}{2}$).

***57. Golf.**

Required of all women majoring in physical education.

($\frac{1}{2}$).

58. Rowing.

No credit.

* Women majoring in physical education are expected to select one yearly sport as a major activity and two others as minors. This requirement refers to rules, teaching methods, and technique of playing, as well as to the skills of the individual.

UPPER DIVISION COURSES

102. Emergency and Safety Programs.

Means by which the number of accidents, especially among children, may be reduced on street, playground, or at home; practical application of first aid methods. Of value to classroom teachers as well as to specialists in physical education.

(1).

151. Health Education.

TANNER

A course for teacher-training students which includes the study of the diseases, common physical defects, and health indices of school children; the detection and control of communicable diseases which may appear in the school; and the elements which underlie a health education program. Methods of presenting personal and group health to children of different ages. Hygiene of the schoolroom, such as seating, lighting, and ventilation.

Fall and Spring (2).

153. Administration of Secondary Physical Education.

TANNER

Study of department organization and procedures with practical experience in administration. The college department and like departments in high schools serve as laboratories. Open only to seniors majoring in physical education.

(2).

154. Applied Anatomy.

TANNER

A study of the movements of the human body with especial reference to the physical activities and capacities of girls and women.

(2).

157A-157B. Sports Methods.

Practice for skill, study of rules, and of coaching methods. Prerequisite: A season's experience in at least four of the following sports—volley ball, basketball, hockey, speedball, soccer, baseball, tennis, and track activities.

Year course (2-2).

158. Stunts and Tumbling.

A practical course in personal technique. Progressive series of individual, dual, and group stunts, including simple pyramids.

($\frac{1}{2}$).

160. Formalized Activities.

TANNER

The scientific adaptation of formalized exercises to individuals and to groups; an activity and methods class with opportunity for supervised practice teaching; elementary exercises on apparatus.

(2).

161. Folk Dancing.

A series of folk and national dances for elementary and junior high

schools. Emphasis placed on methods of presentation as well as upon ability to execute the various dances. Note books required.

(2).

164. Dance Activities.

A course introductory to dramatic expression, interpretative, character, and tap dancing, particularly adapted to elementary and junior high schools.

(2).

169. Technique of Teaching Activities.

Observation, lesson planning, and teaching of college classes.

Fall and Spring (3).

170. Recreational Leadership.

TANNER AND STAFF

Fundamentals of recreational leadership developed by instruction in Scout craft, Camp Fire lore, Girl Reserve activities, the study of school recreational needs and facilities, and of civic recreation.

(2).

173. Principles of Physical Education.

TANNER

The relation of physical education to other phases of education, with emphasis upon health and social adaptation.

(2).

174. Campcraft.

TANNER AND STAFF

The technique of life in open camp developed by camp experience, preceded by study of selection of equipment, proper outing clothes, tents, making beds in the open, making camp fires, camp cooking, and camp recreations. Enrollment only by permission of the instructor.

(2).

175. Current Problems in Physical Education.

TANNER

The latest phases of general physical education; problems particularly related to the work with younger children, girls, and college women; the responsibility of the physical instructor toward emergencies and health service. Open only to seniors majoring in physical education.

(2).

177. Individual Program Adaptations.

TANNER

Adjustments of the physical education program to the physical needs and capacities of individuals; problems concerning protective and preventive measures which are not highly specialized corrective phases.

(2).

178A-178B. Camp Fire and Girl Scout Leadership.

The principles and procedures fundamental to leadership in these two important organizations for girls taught by authorized local directors. Useful to college women interested in recreational aspects of social service. Open to all students.

A. Camp Fire Leadership (1).

B. Girl Scout Leadership (1).

PHYSICS

Lower division preparation in physics for advanced work and for the junior certificate: Required: Physics 1A-1B and 1C-1D; Chemistry 1A-1B; Mathematics 3A-3B and 4A-4B, or their equivalents. Recommended: A reading knowledge of French and German.

LOWER DIVISION COURSES

1A-1B. General.

MOE

Mechanics, properties of matter, and heat. A development of the fundamental ideas which underlie the subject of physics, and the application of them in the discussion of practical problems. Lectures, text assignments, problem sets, and experimental laboratory work. Two lectures, and one laboratory period each week. Prerequisites: High School physics or chemistry and trigonometry.

Year course (3-3).

1C-1D. General.

BAIRD

A continuation of Physics 1A-1B for students in the sophomore year, including magnetism, electricity, sound, and light. Two lectures and one laboratory period each week.

Year course (3-3).

2A-2B. General.

BAIRD

Properties of matter, mechanics, heat, sound, light, electricity, and magnetism. A nonengineering course. Lectures, demonstrations, and discussions. Prerequisite: Two years of high school mathematics.

Year course (3-3).

3A-3B. Physical Measurements.

MOE

Laboratory work in mechanics, properties of matter, heat, sound, light, electricity, and magnetism. Usually taken in conjunction with Physics 2A-2B.

Year course (1-1).

UPPER DIVISION COURSES

105A-105B. Analytical Mechanics.

MOE

Treatment of fundamental principles of statics, kinematics and dynamics of particles and rigid bodies. Prerequisites: Physics 1A-1B or 2A-2B and a working knowledge of calculus.

Year course (3-3). (Offered in even-numbered years.)

106. Optics.

BAIRD

Refraction, color, interference, diffraction, polarization, radiation, and optical instruments.

Fall (3). (Offered in even-numbered years.)

107A-107B. Electrical Measurements.

BAIRD

Devoted mainly to the study of potentiometer methods, capacity,

inductance, resistance, and magnetic flux. Two lectures and one laboratory period each week. Prerequisite: Eight units in physics.

Year course (3-3). (Offered in odd-numbered years.)

108. Modern.

BAIRD

An introductory survey of the problems of modern physics. Theories of atomic structure and series in optical spectra, radioactivity, conduction of electricity through gases, radiation and the quantum theory. Prerequisite: Eight units in physics.

Spring (3). (Offered in odd-numbered years.)

112. Advanced Heat.

MOE

Thermal properties of matter. An introduction to the kinetic theory of gases and the laws of thermodynamics. Prerequisites: Eight units in physics and a working knowledge of calculus.

Spring (3). (Offered in even-numbered years.)

114. Wave Motion and Sound.

A study of wave motion and its applications to sound production and transmission. The principles of musical instruments and architectural acoustics.

Prerequisite: Eight units of physics.

Fall (3). (Offered in odd-numbered years.)

199. Special Study.

BAIRD, MOE

Reading or work on special problems in physics. Admission by consent of the instructor. Credit and hours to be arranged in each case. Open to students who have completed at least eight units of work in the department with grade of A or B.

Fall and Spring (1 or 2—1 or 2).

POLITICAL SCIENCE

Lower division preparation in political science for advanced work and for the junior certificate: Political Science 1A-1B and Economics 1A-1B or History 4A-4B or Geography 1 and 2. High school civics is presupposed in the following courses:

LOWER DIVISION COURSES

1A-1B. Comparative Government.

LEONARD

A comparative study of typical European governments and the government of the United States. Semester I: England, France, Germany, Italy and Switzerland. Semester II: The lesser European states and the United States.

Year course (3-3).

UPPER DIVISION COURSES

101. American Institutions.

LEONARD

Origins and principles of the United States Constitution, and a survey of the political institutions which have developed under it.

Prescribed by the State law for all candidates for the bachelor's degree. Enrollment is limited to juniors and seniors, except with the consent of the instructor. Attention is called to the fact that this course is offered only during the Fall semester.

Fall (2).

111. Theory of the State.

LEONARD

The nature of the State, its organization and activities, and its relation to individuals and to other states.

Fall (3).

113. American Political Ideals.

LEONARD

Underlying theories and principles of American governmental policy.

Spring (3).

151. Governmental Organization in the United States.

LEONARD

Origins; the federal system; organization, powers and functions of the executive, legislative, and judicial branches of the National government and expansion of its activities; the party system.

Fall (3). (Not offered in 1934-1935.)

152. Popular Government in the United States.

LEONARD

Development of the means for democratic control of government in the United States; the history, motivation, methods and control of political parties; party machines; election systems; influence of minority groups; the lobby; the press.

Spring (3). (Not offered in 1934-1935.)

PSYCHOLOGY

Lower division preparation in psychology for advanced work and the junior certificate. Required: Psychology 1A-1B, Zoology 1A-1B, or Biology 10A-10B, Philosophy 5A-5B. Recommended: French, German, Chemistry, Physics, and Anthropology.

LOWER DIVISION COURSES

1A. General.

BELL, STEINMETZ

An elementary survey of normal adult psychology, focused upon personality; the subjective and objective aspects of behavior; use of a work book assures individual participation and contribution. Furnishes basis for all other courses in psychology. No prerequisites except sophomore standing.

Fall and Spring (3).

1B. General.

BELL, STEINMETZ

Systematic psychologies, problems of development and of malfunction. Extensive readings of experimental studies; one thorough study required of each student. Prerequisite: Psychology 1A.

Spring (3).

4A. Applied.

BELL

Applications of psychology to problems of the individual in learning, making social adjustments, choosing a vocation, developing desirable personality traits, and achieving success and happiness. Survey of psychology as applied in business, education, music, art, speaking, writing, and in the professions. No credit for those who have had Psychology 2B. Prerequisite: Psychology 1A. Recommended: Psychology 1B.

Fall (2).

4B. Psychology Applied in Business.

BELL

Applications of psychology to a wide range of problems encountered by the man in business. Motives, attitudes, habits, and traits in their relation to behavior of employer, employee, and executive. Advertising, salesmanship, and problems of selecting, placing and increasing the efficiency of employees. Prerequisite: Psychology 1A. Recommended: Psychology 1B.

Spring (2).

UPPER DIVISION COURSES

102. Genetic (Growth and Development of the Child).

BELL, STEINMETZ

The mental and physical growth and development of the child, especially with relation to norms of structure and function. Diagnosis of individual children by comparison with norms. Behavior problems and the growth of personality traits as conditioned by physical and mental factors. An intensive study of one child presenting a problem of physical or mental maladjustment made by each student. Prerequisite: Psychology 1A.

Fall and Spring (3).

105. Mental Testing.

BELL

A brief history of intelligence testing and the fundamental assumptions underlying the construction of tests. The Stanford revision of the Binet-Simon test illustrated by demonstrations. Each student required to give at least 20 individual tests. Group intelligence tests discussed and demonstrated. The nature of intelligence and skill in testing it and interpreting results. Prerequisites: Psychology 1A and Education 108. Recommended: Psychology 102, Education 140.

Fall (3).

118. Mental Hygiene.

BELL

A study of mental health, or the normal mind; factors which contribute to, or disturb integration. Forms of maladjustment and their treatment. Prerequisite: Psychology 1A.

Fall (2).

120. History of Psychology.

BELL, STEINMETZ

Historical development of psychology out of mental philosophy; sensationism; the body-mind problem; associationism; structuralism; functionalism; rise of the schools and experimental procedures. Prerequisites: Psychology 1A, 1B.

Fall (2). (Offered in even-numbered years.)

140. Contemporary Psychology.

STEINMETZ

Psychoanalysis, behaviorism, and Gestalt psychology; the modern eclectic viewpoint; non-Aristotelian speculation; factor analysis; characteristic British, French, German, and American contributions; outstanding problems, publications and fields. Prerequisites: Psychology 1A, 1B, 120, or other upper division work in the department provided instructor and head of the department consent.

Spring (2). (Offered in odd-numbered years.)

145. Social.

BELL

Personality as it develops in relation to social environment. Suggestion, imitation, leadership, the crowd, public opinion, social control, prejudice, propaganda, sex differences, race differences, etc. Prerequisite: Psychology 1A.

Spring (3).

160. Experimental: Psychology of Learning.

BELL, BROOM

Preparatory study of learning, including such topics as laws of learning; improvement in learning; remembering; and forgetting; fatigue; and transfer of training. Extensive reading in reports of experimental studies in learning. Individual experimental work required of each student. Prerequisites: Psychology 1A, 1B. Recommended: Education 130.

Spring (3).

Educational Psychology. See Education 130.

Educational Measurements. See Education 108.*

SPEECH ARTS

(See English)

SURVEYING

LOWER DIVISION COURSE

1A-1B. Plane Surveying.

GLEASON

Use and adjustment of surveying instruments, computations and map-making, together with a study of land, topographic, city, and mine surveying. Two instruction periods and one three-hour period for field

* Students taking a curriculum in which Education 108 is required, must substitute another three-unit course in education, if they wish to count Education 108 in a psychology minor.

work and mapping each week. Prerequisite: Trigonometry and Mechanical Drawing, and sophomore standing.

Year course (3-3).

ZOOLOGY

(See Biological Sciences)

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